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AN ANALYSIS OF THE DEFENSE SUPPORT OF CIVIL AUTHORITIES (DSCA) REIMBURSEMENT PROCESS

March 2019

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(DSCA) REIMBURSEMENT PROCESS**

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ABSTRACT

This project analyzed the existing process used by Department of Defense forces to authorize and claim reimbursement from the Federal Emergency Management Agency (FEMA) while providing Defense Support to Civil Authorities (DSCA). Research was conducted on existing policies and documented DSCA procedures at each level within the network. This project used a process analytics approach to map a flowchart along with interviews conducted among key stakeholders to obtain insight into each role while requesting improvement recommendations. A quantitative analysis of the primary DSCA database also yielded an understanding of how each stakeholder interfaces the portal, attempting to understand the utility of such a system during one specific DSCA event.

The analysis resulted in the conclusion that the area of greatest weakness is found in the level of process knowledge at the operational level. This is believed to have created coordination challenges that prevented proper claim submission. This study recommends the creation of a standardized reference for users at the unit and FEU operational levels defining their role in the process and the proper procedures to be executed. This is believed to offer the largest benefit in the shortest period of time.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AFPD	Air Force Policy Directive
AFI	Air Force Instruction
AFMAN	Air Force Manual
AOR	Area of Responsibility
ASD	Assistant Secretary of Defense
C2	Command and Control
CFR	Code of Federal Regulations
CNO	Chief of Naval Operations
DCO	Defense Coordinating Officer
DDASS	DoD DSCA Automated Support System
DFAS	Defense Finance and Accounting Service
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDM	Department of Defense Manual
DSCA	Defense Support of Civil Authorities
EXORD	Execute Order
FEMA	Federal Emergency Management Agency
FFC	Fleet Forces Command
FM	Financial Management
FMAT	Financial Management Augment Team
FMR	Financial Management Regulations
FRAGORD	Fragmentary Order
IG	Inspector General
JCS	Joint Chiefs of Staff
JP	Joint Publication
MA	Mission Assignment
MCO	Marine Corps Order
NAVNORTH	Navy North

NRF	National Response Framework
OPNAVINST	Chief of Naval Operations Instruction
OPORD	Operations Order
OSD	Office of the Secretary of Defense
RBA	Reimbursable Budget Authority
SAF	Secretary of the Air Force
SECDEF	Secretary of Defense
SOP	Standard Operating Procedures
USC	United States Code
USD	Under Secretary of Defense
USINDOPACOM	United States Indo-Pacific Command
USNORTHCOM	United States Northern Command

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I. INTRODUCTION

Since the birth of the United States, there have been repeated instances where the U.S. Armed Forces were called upon to assist local and state governments to confront civil and natural disaster-related challenges. Underlying those assistance efforts is a responsibility to the U.S. taxpayer to responsibly track expenditures and associated reimbursements. The means and methods of financial management operations throughout the Department of Defense (DoD) Defense Support of Civil Authorities (DSCA) mission have continually evolved, and although these methods have improved over the course of our military's history there remains a need for additional refinement. The following overview provides a brief background of the DSCA mission and the financial challenges associated with such efforts. The questions to be confronted by this analysis are established and the steps taken to answer these questions are presented.

A. A BRIEF HISTORY OF THE DEFENSE SUPPORT OF CIVIL AUTHORITIES MISSION

In July 1794, a group of 500 armed men in the newly formed State of Pennsylvania attacked the home of the regional tax inspector. Several years earlier, Alexander Hamilton pushed the first internal revenue tax through Congress in an effort to collect funds to pay down the debt accumulated during the American Revolution. One commodity affected by the tax was liquor, which was produced in large quantities in Western Pennsylvania where it was used as an informal currency in the region, hence the opposition to the tax. The attack marks the first rebellion against federal rule in the newly formed nation. President Washington's response was a swift call to order of 13,000 militia troops from Pennsylvania, New Jersey, Maryland, and Virginia. The opposition declined armed conflict and the rebellion was suppressed without the loss of life (Kotowski, n.d.). This marked the first time in our nation's history in which the concept of Defense Support of Civil Authorities (DSCA) was used to maintain order within our nation's borders

Thirteen years later, Congress officially passed legislation establishing 10 U.S.C. §§ 331–335, also known as the Insurrection Act. This legislation formally gave the

President the authority to use the armed forces to suppress rebellion and insurrection, at the request of a state's governor (9th U.S. Congress, 1807). This act was exercised often throughout the 19th century in response to rebellions, conflict with Native Americans, the Civil War, and urban riots. In 1887, Congress passed the Posse Comitatus Act, a Latin phrase for "force of one's country," in an effort to limit the scope of allowable federal assistance and exclude law enforcement by the military unless otherwise authorized by Congress (Larson & Peters, 2001). This minimized federal support to local law enforcement organizations. Though support to law enforcement falls within the general DSCA umbrella, it is outside of the scope of this analysis.

While DSCA's origins lie in support to law enforcement, the largest area of DSCA effort in recent history has been disaster relief. Whether it be via flooding, tornadoes, hurricanes, forest fires or earthquakes, the Department of Defense has a secondary mission to provide support to state governments and the Federal Emergency Management Agency (FEMA) when events arise that overwhelm the emergency management capabilities of those organizations. To understand the DoD's role in DSCA efforts specifically related to natural disasters and to understand how we have arrived at the current processes, it is once again beneficial to take a look at history.

B. DISASTER RELIEF

The first instance of federal disaster relief can be traced back to 1803 when the 7th Congress passed An Act for The Relief of the Sufferers by Fire, in the Town of Portsmouth of 1803. This statute provided federal tax relief to all those affected by the fire (7th U.S. Congress, 1803). For the next century, any federal disaster relief was funded on an ad hoc basis, requiring Congress to pass a relief bill of every disaster. The first change to this format was the Flood Control Act of 1934 which funded the Army Corps of Engineers to design and build flood control projects throughout the country. Additionally, in 1958, the Office of Civil Defense and Mobilization was created which facilitated federal funding and coordination to the hundreds of state and local Civil Defense Directors that dotted the nation. Catastrophic hurricane damage during the 1960s led to the creation of the federally organized National Flood Insurance Program in 1968. Ad hoc funding for individual

disaster relief continued until 1978, when President Jimmy Carter signed Executive Act 12127, thereby creating FEMA (Haddow, Bullock, & Coppola, 2017).

The creation of the FEMA provided the solution to the previous practice of ad hoc funding for each disaster. Direct funding provided to this new agency, in combination with the provisions allowed by the Economy Act, authorized FEMA to request disaster recovery services from the DoD when local, state, and FEMA resource capacity was surpassed. Ten years after the creation of FEMA, the Stafford Act of 1988 authorized the DoD to spend DoD appropriations with the provision of FEMA reimbursement provided there is a Presidential Disaster Declaration associated with the services and goods provided (100th U.S. Congress, 1998).

C. THE CURRENT CHALLENGE

For 27 years, the processes executed by FEMA when confronting natural disasters were sufficient to meet the challenges presented. Hurricane Katrina in 2005 presented a scale of complexity never before seen by the organization. It highlighted several areas of weakness that FEMA and the DoD would have to confront moving forward. Financial management in the face of such complexity, specifically within the area of accurate interagency reimbursement, was seen as lacking. Steps have been taken over the past 13 years to improve the level of accuracy within the reimbursement practices of the DoD, yet challenges within the current process still exist.

A highly simplified version of the process is as follows: FEMA requests support and provides reimbursable budget authority to the DoD, and, if able to support, U.S. Northern Command (USNORTHCOM) conducts staff planning and issues orders. Individual units provide cost estimates to validate the FEMA reimbursable authority amount, then execute DSCA work with their own DoD budget authority, then submit reimbursement requests that ultimately are paid by FEMA. While the steps above comprise the essential steps, the full process flow is complex and involves not just USNORTHCOM and units of action, but also service-level comptrollers, Defense Finance and Accounting Service (DFAS), U.S. Army North (ARNORTH), multiple accounting systems, and many intermediate steps (U.S. Northern Command [USNORTHCOM] J83, 2018).

D. PROBLEM STATEMENT

According to the DoD's DSCA tracking database, FEMA issued \$165.3 million in reimbursable budget authority to the DoD during Hurricane Harvey in Fiscal Year 2017. The magnitude and complexity of the reimbursement process led to the research question of this analysis: **Are all of the services provided by the DoD accurately reimbursed by FEMA?** Since FEMA executes all reimbursement requests received, provided the requests are not for more than initially authorized, this places the duty to answer this question within the realm of DoD's responsibility. Furthermore, it can be noted that this initial problem statement can be followed by other questions of consequence.

1. If the DoD is not executing the full reimbursable authority granted by FEMA for the services rendered and is instead using authority from the DoD budget, what are the factors leading to, and consequences of, not doing so and can this be calculated?
2. If there are instances where DoD has requested more than authorized, what are the factors that create such a situation?
3. What does the difference between the FEMA authorized reimbursement amount and the amount actually claimed represent?
4. If the amount request is less than what should be reimbursed, can the shortfall be calculated during one specific hurricane event?
5. If the amount requested is less than what is should be claimed, how might the process be improved?
6. Do the unit level financial managers understand the reimbursement process and their role within the process?
7. How does the non-routine nature of the DSCA funding and reimbursement process contribute to issues with reimbursement rates and timelines?

It is the intention of this study to answer the initial and follow on problem statement questions in an effort to assist USNORTHCOM in improving the DSCA reimbursement process.

E. APPROACH

This project analyzes the existing process used by Department of Defense forces to obtain reimbursement from the Federal Emergency Management Agency (FEMA) while providing Defense Support of Civil Authorities (DSCA). A full review of all the publications, policies, and directives governing the authorization and reimbursement process related to the DSCA mission establishes the understanding of how the process is intended to flow. This project then presents a process analytics approach to map and identify problems within the authorization and reimbursement process. Interviews with key members within the process help determine the scope of their function and role in the process. A review of the reimbursements to the DoD from FEMA related to the Hurricane Harvey event within the online financial management software known as the DoD Defense Support of Civil Authorities Automated Support System (DDASS) is valuable in attempting to quantify the potential difference between what is and should be reimbursed. The intent of these combined efforts is to answer the problem statement questions above.

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II. BACKGROUND ON DOD SUPPORT OF FEMA

Recent years have seen significant natural disasters in the United States, the response to which required DoD to provide DSCA. As the combatant command for homeland defense and DSCA efforts, it is USNORTHCOM's responsibility to plan for and coordinate DSCA efforts in support of FEMA. The bulk of the DoD support comes in the form of services such as search & rescue and transportation. These services come at a cost, and it is the DoD's responsibility to seek reimbursement from FEMA.

The poor federal response to Hurricane Katrina in 2005 led to multiple investigations, audits, and a Congressional investigation. Eight internal audits conducted by the Government Accountability Office (GAO), DoD Inspector General (IG), Army Audit Agency (AAA), Naval Audit Service (NAS) and Air Force Audit Agency (AFAA) focused on the financial management operations of the DoD relief effort (Department of Defense Inspector General [DoDIG], 2008). Hurricane Katrina was not only a focusing event for all federal disaster relief efforts, it was also a defining moment for DSCA financial management operations. Prior to Hurricane Katrina the financial management process was not clearly defined.

In response to IG investigative fieldwork the Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer [USD(C/CFO)] published a June 2006 memo directing the establishment of a Financial Management Augmentation Team (FMAT) with each military service to provide three personnel as members. The FMAT will "assist USNORTHCOM in testing and validating financial management processes and controls developed by USNORTHCOM" for support of DSCA (Jonas, 2006, p.1). Additionally, the FMAT will train and coordinate with USNORTHCOM for DSCA and complete the financial management during these events (DoDIG, 2006).

A. HURRICANE KATRINA

On August 23, 2005, a tropical depression developed in the southeastern Bahamas. This depression developed into Hurricane Katrina. On August 29, it struck Louisiana

approximately 45 miles southeast of New Orleans as a Category 4 hurricane (National Weather Service, 2016).

At the request of Louisiana's governor, President Bush declared a major disaster on August 29, 2005 (Federal Emergency Management Agency [FEMA], 2005). The initial military response was from National Guard units followed shortly by active duty personnel. As of September 12, 2005, over 22,000 active duty personnel and 46,000 national guard members were supporting relief efforts. The Navy and Coast Guard had 21 ships on station. Over 19 million Meals Ready to Eat (MRE), 40 million liters of water, and 140 million pounds of ice had been delivered to Louisiana and Mississippi (USNORTHCOM, 2005).

Though USNORTHCOM is responsible for DSCA in the continental United States, the DSCA function is a secondary mission, as the DoD is a "fifth level responder" under the National Response Framework (NRF) (DoDIG, 2008, p 3). The massive DoD response to Hurricane Katrina ultimately strained USNORTHCOM's ability to fulfill this secondary mission, including the financial management operations required to execute DSCA tasks.

A 2008 DoD Inspector General (IG) report investigated the DoD's financial management operations during Hurricane Katrina. The IG reviewed the tracking, approval process and financial management aspects of DoD disaster relief efforts specific to Katrina. The IG found that "DoD did not effectively manage financial operations during the Hurricane Katrina relief efforts." This ineffective financial management was due to guidance that was out of date and conflicted, this risked surpassing "mission assignment dollar thresholds" established by FEMA (DoDIG 2008, p. 20).

The 2008 IG report also revealed that the DoD did not properly track the Mission Assignments (MA) being issued to DoD by FEMA. MA are the primary mechanism that FEMA uses to request federal assistance under the NRF. They contain financial and administrative requirements to which responding agencies must adhere (FEMA, 2015). During Hurricane Katrina relief efforts, different entities, including USNORTHCOM, Joint Chiefs of Staff (JCS), and the Department of Homeland Security (DHS), manually tracked MAs and amendments on different spreadsheets. The IG found that the data in none of the independently created and maintained spreadsheets matched any other spreadsheet;

neither did any entity properly account for all of the 121 MAs and amendments, valued at \$2 billion (DoDIG, 2008). The lack of consistent information led to the development of the DoD DSCA Automated Support System (DDASS), a website that allows each responsible party to review, track and input its required information under respective mission assignments (USNORTHCOM J83, 2018).

Another finding of the IG was that the initial execute orders (EXORDs) and subsequent modifications from USNORTHCOM did not contain the funding data and MA numbers necessary for tasked units to understand their reimbursable budget authority, nor did they properly allocate reimbursable budget authority (RBA) on a proportional basis. This could have caused DoD to exceed funded amounts established for the MAs (DoDIG, 2008). These incomplete EXORDs adversely impacted the financial operations of Katrina relief efforts.

Additionally, the DoD 3025 series of directives was found to be outdated. This series of directives “[e]stablishes policy and assigns responsibilities for DSCA,” as well as provides guidance for oversight and execution of DSCA events when DoD support has been requested (Office of the Under Secretary of Defense for Policy, 2018). The IG report also identified that USNORTHCOM’s structure and oversight of the FMAT was problematic and that the FMAT did not have a standard method for establishing and recording how funds were divided between different units. The IG report also pointed out that USNORTHCOM should make provisions for services other than the Army to execute DSCA financial management operations (DoDIG, 2008). In summary, the IG concluded that “[p]roviding guidance for financial management of the mission assignments should allow DoD to improve processes for mission assignments for future disasters” (DoDIG, 2008).

B. HURRICANE HARVEY

On August 12, 2017, a tropical wave formed off the west coast of Africa. This was the beginning of Hurricane Harvey. Harvey was expected to make landfall as a strong Tropical Storm or Category 1 hurricane, hitting Texas somewhere between Brownsville and Houston. By the August 24, Harvey’s intensity had strengthened and was expected to

reach Category 3, make landfall and stall out over Texas for days. Having intensified to a Category 4, Harvey approached the Texas coast the evening of August 25. At approximately 2200 hours local time, Harvey hit San Jose Island and eventually the areas of Rockport and Fulton, Texas (US Department of Commerce, 2018). President Trump made the major disaster declaration the same evening (Diamond & Tatum, 2017)

Storm surges, as high as 12 feet in some areas, contributed to the disaster. Historic rainfall significantly affected southern Texas. Major river flooding occurred on the Guadalupe River with many other rivers and creeks reaching their peaks as well. On August 30 Harvey made its final strike in Cameron, Louisiana. Heavy rain and flooding continued throughout this final landfall (U.S. Department of Commerce, 2018). During its five-day onslaught, Harvey caused approximately \$125 billion in damage, second only to Hurricane Katrina (World Vision, 2018).

The relief effort was significant. Texas Governor Greg Abbott called up the 12,000 available of the 19,000 total Texas National Guard troops. There were 20,000–30,000 more troops available from other states should the appropriate requests be made. Ten other states lent assistance including, California, New York, and Connecticut. Most of the federal government assistance came in the form of supplies or equipment. USNORTHCOM deployed 1,000 active duty personnel (Maucione, 2017). The Army Corps of Engineers rendered services for everything from sandbagging areas to dewatering flood zones and power restoration (Davidson, 2017). By September, more than 16,800 people had been rescued by federal agencies to include the United States Coast Guard, Customs and Border Protection and the Department of Defense (FEMA, 2017).

As one of the most recent major hurricanes to require DSCA, Hurricane Harvey will be the case study for USNORTHCOM's financial management response. The severity of this hurricane and two closely following hurricanes, Hurricanes Irma and Maria, provides an opportunity to review USNORTHCOM financial management practices and FMAT performance in the wake of a catastrophic event requiring DSCA.

III. STATUTORY AND REGULATORY FRAMEWORK

This chapter describes the statutes, regulations, and directives that apply to the reimbursement process. It is important to understand what restrictions and policies are in place such that current procedures may be compared to regulatory limitations, and policy gaps may be identified during the process analytics phase of this project. Analyzing the requirements outlined in existing regulations may also lead to insights about requirements that are not being met, or DoD-imposed requirements that are neither functionally necessary or required by statute.

A. NATIONAL RESPONSE FRAMEWORK

The National Response Framework (NRF) is neither a statute nor a regulation, but is a document that provides a framework for response to disasters and other emergencies within the United States. It outlines responsibilities and coordination systems from the individual citizen level up through the federal government level. It is important to note that the NRF does not indicate that the DoD has any primary responsibilities for incident response, but instead simply points to the legal authorities available to utilize DoD assets after civil authority resources have been overwhelmed. As a Department of Homeland Security publication, the NRF is a key document that provides guidance to as to when civil authorities may seek DoD support but does not address how such support is funded (Department of Homeland Security [DHS] 2016a).

B. CURRENT STATUTORY AUTHORITIES

Title 32, Part 185 of the Code of Federal Regulations (32 CFR 185) identifies the legal authorities providing for DSCA (Defense Support of Civil Authorities, 2011). There are two statutes that provide the legal authority for FEMA to reimburse (DoD) for costs incurred by the DoD in support of a FEMA mission.

The first statute is the Economy Act of 1984, which provides the authority for agencies to reimburse other agencies for work (98th U.S. Congress, 1984). The Economy Act is a general statute, not tied to any specific function such as disaster relief, and 48 CFR

17.502-2 states that “The Economy Act applies when more specific statutory authority does not exist” (98th U.S. Congress, 1984). Relevant to the issue of FEMA-funded reimbursable work, this means that Economy Act orders may be issued from FEMA to the DoD in the absence of a formal disaster declaration. The Economy Act has been modified since its original issuance but the general concept of one agency purchasing from another agency has not changed.

The second statute is the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1998 (Stafford Act), which provides specific authorities only following a Presidential declaration of major disaster or emergency after receiving a declaration request from one or more state governors. Once the declaration is made, the provisions of the Stafford Act apply to Federal disaster response. Key provisions of the Stafford Act are outlined below.

Section 304 of the Stafford Act provides for reimbursement authority, noting that “Federal agencies may be reimbursed for expenditures under this Act from funds appropriated for the purposes of this Act,” which provides the legal framework for reimbursement to occur (100th U.S. Congress, 1998).

Section 402 of the Stafford Act governs “General Response” and provides the President the authority to “direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of State and local assistance response and recovery efforts, including precautionary evacuations.” (100th U.S. Congress, 1998).

Section 403 (c) of the Stafford Act provides amplifying information as pertains only to “Essential Assistance,” or “assistance essential to meeting immediate threats to life and property resulting from a major disaster.” Under this section, the utilization of DoD resources for a disaster that “may ultimately qualify for assistance under this title or title V of this Act” is limited to ten days following a gubernatorial request to the President, and ensuing direction through the Secretary of Defense (SECDEF) for the DoD to render assistance” (100th U.S. Congress, 1998, p. 403a).

C. DOD REGULATIONS

Implementation of DoD DSCA effort starts at the SECDEF level. 10 U.S.C. 113 (g)(3) requires that SECDEF provides the “Chairman [of the Joint Chiefs of Staff] written policy guidance for the preparation and review of contingency plans, including plans for providing support to civil authorities in an incident of national significance or a catastrophic incident” (115th U.S. Congress, 2017). DoD regulations implementing authorities stemming from U.S. Codes are recorded in the CFR, and are promulgated in Directives and Instructions. CFR and Directive sections relevant to the DSCA reimbursement process are discussed here.

The Office of the Under Secretary of Defense (Policy) publishes DoD Directive 3025.18, which broadcasts the policies and responsibilities outlined in 32 CFR 185 in a directive format to the DoD. Key provisions of 32 CFR 185 are discussed below.

32 CFR 185.4—Policy makes explicit the requirement for reimbursement to the DoD for DSCA work, stating “All requests for DSCA shall be written, and shall include a commitment to reimburse the Department of Defense in accordance with the Stafford Act, Economy Act, or other authorities except requests for support for immediate response, and mutual or automatic aid” and further clarifies that all actions should be done on a reimbursable basis (Defense Support of Civil Authorities, 2011). Of note, this is more stringent than the Stafford Act in requiring reimbursement for DoD support to FEMA.

32 CFR 185.5—Responsibilities further defines duties within the Office of the Secretary of Defense (OSD), laying out specific tasks within the DoD for managing the DSCA reimbursement process as follows.

“The Under Secretary of Defense (Comptroller)/Chief Financial Officer shall...Establish policies and procedures to ensure timely reimbursement to the Department of Defense for reimbursable DSCA activities.” This requires a DoD-wide procedure for reimbursement management, and rules are codified in the Financial Management Regulations (FMR), which is discussed further in the next section.

“The Heads of DoD Components shall...direct Component compliance with financial management guidance related to support provided for DSCA operations,

including guidance related to tracking costs and seeking reimbursement.” As each service processes financial transactions differently, each Component must prepare more specific reimbursement guidance than might come from the SECDEF level.

“The Secretaries of the Military Departments...shall...direct that requests for reimbursement of actual DSCA expenditures (performance of work or services, payments to contractors, or delivery from inventory) begin within 30 calendar days after the month in which performance occurred. Final billing invoices shall be submitted...within 90 calendar days of the termination of the supported event.”

“The Commanders of Combatant Commands with DSCA responsibilities...shall...work closely with subordinate commands to ensure that they are appropriately reimbursed for DSCA.” USNORTHCOM provides reimbursement assistance, produces a procedural handbook and leads a Financial Management Augment Team (FMAT) for its Area of Responsibility (AOR) (Defense Support of Civil Authorities, 2011).

D. FUNCTIONAL REGULATIONS AND IMPLEMENTATION GUIDANCE

The DoD issues regulations that provide implementation guidance beyond what is found in the CFR and departmental directives. The Under Secretary of Defense (Comptroller) issues Volume 11A, chapter 19 of the FMR to establish “financial policy for identifying, recording, reporting, and obtaining reimbursement for costs the Department of Defense (DoD) incurs in its role of providing Defense Support of Civil Authorities (DSCA)” (Under Secretary of Defense (Comptroller) [USD(C)]), 2015, p. 4). The chapter provides an overview of DSCA responsibilities and statutory authorities, provides accounting guidance, and defines terms used within DSCA operation. Volume 11A, chapter 19 also outlines responsibilities for DSCA as pertaining to financial management within the DoD and outlines the generic process for reimbursement. Of particular note, the FMR also introduces the Financial Management Augment Team (FMAT) concept, establishing the need for a multi-command financial team to handle the DSCA reimbursement process (USD(C), 2015).

The DoD does outline key responsibilities of the Defense Coordinating Officer (DCO) in Department of Defense Instruction (DoDI) 3025.23, Defense Liaison with Civil

Authorities. Of key importance to financial management processes, this instruction assigns the following tasks to the DCO:

- Maintaining MA records using DDASS, including estimated and actual costs,
- Facilitation of MA closeouts, to include coordination with DoD components,
- Coordination with FM entities of Combatant Commanders to both facilitate and report on the status of reimbursement (Office of the Under Secretary of Defense for Policy [OUSD(P)], 2016a).

The DoD also issues a series of manuals providing further guidance in the implementation of directives and regulations. DoD Manual (DoDM) 3025.01, Volume 2, Defense Support of Civil Authorities: Incident Response, provides guidance categorized by incident type and provides brief synopses for authorities, responsibilities, and processes for various types of DSCA response events. Of note, this manual provides an explanation of the mechanism and process through which FEMA requests DoD support—the Mission Assignment (MA) (OUSD(P), 2016b). The manual, however, does not delve into specifics with regard to the process of reimbursement for DSCA work.

E. MULTI-SERVICE DOCTRINAL PUBLICATIONS AND STANDARD OPERATING PROCEDURES

The Joint Staff issues doctrinal publications called Joint Publications to establish and promulgate “overarching guidelines and principals” that are common across service lines (Joint Staff, 2013, p. i). Joint Publication (JP) 3–28, Defense Support of Civil Authorities, is the doctrinal publication for DSCA support. It provides background on the NRF, reimbursement authorities, command and control structures, and references DoDD 3025.18 extensively. Of particular note, JP 3–28 contains an appendix devoted to reimbursement, in which reimbursable and non-reimbursable cost types are identified (Joint Staff, 2013). JP 1–06, Financial Management Support to Joint Operations, contains limited information about the reimbursement process but recognizes USNORTHCOM’s

ability to manage a DSCA reimbursement process and stand up Financial Management Augment Teams (Joint Staff, 2016).

USNORTHCOM issues its own Standard Operating Procedure (SOP), the Financial Management Augment Team (FMAT) Handbook. This document is an SOP that provides substantially more detail about the reimbursement process than does the FMR or other DoD publications. It includes more detailed process flowcharts than the FMR, explicitly listing each step in the reimbursement process, and explicitly tying actions within the process to specific entities. The document has been updated several times in calendar year 2018, with a goal of issuing the document as a signed USNORTHCOM J8 publication in calendar year 2019 (USNORTHCOM J83, 2018).

F. SERVICE LEVEL REGULATIONS AND GUIDANCE

Each service implements financial management processes differently, due to different organizational structures and accounting systems.

Air Force Policy Directive (AFPD) 10–8 requires that the “Assistant Secretary of the Air Force for Financial Management and Comptroller (SAF/FM) will publish policy and guidance pertaining to reimbursement and accountability of Air Force, Air National Guard and Air Force Reserve Command appropriations expended in DSCA planning thru response phases of operations” (Secretary of the Air Force [SECAF], 2012, p. 4). AFI 10–801 is the implementing instruction for AFPD 10–8 and provides additional details about FEMA requests for support and what types of responses incur reimbursement. It then points financial managers to AFI 65–601, Volume 1 Budget Guidance and Procedures, for instructions on tracking funds and submitting reimbursement requests (SECAF, 2015a). Air Force Instruction (AFI) 65–601, Volume 1, provides minimal expansion of reimbursement processes put but directs readers to Air Force Manual (AFMAN) 65–605, Volume 1 for further details (SECAF, 2018). AFMAN 65–605, Volume 1 is the SAF/FM’s guidance provided to meet the requirement of AFPD 10–8, and does provide guidance on tracking funds and who is responsible for reimbursement requests (SECAF, 2015b).

The Army issues Army Doctrine Publication (ADP) 3–28 Defense Support of Civil Authorities to lay a basic groundwork for the concept of DSCA operations (Department of the Army [DoA], 2012). Army Doctrine Reference Publication (ADRP) 3–28 Defense Support of Civil Authorities is published to further expound upon ADP 3–28 and provide more specific information. Of note, it stresses the requirement for each unit of action to track and submit costs for reimbursement (DoA, 2013).

The Navy publishes the Navy Financial Management Policy Manual (FMPM) that describes generic reimbursable funding procedures, but does not specifically address DSCA processes. The Chief of Naval Operations (CNO) issues OPNAV Instruction (OPNAVINST) 5440.77b, Missions, Functions, And Tasks of United States Fleet Forces Command, to delegate DSCA planning within the continental United States to Fleet Forces Command (FFC), which also functions as USNORTHCOM’s Navy service component (Navy North, or NAVNORTH) (Chief of Naval Operations [CNO], 2012). The CNO also publishes OPNAVINST 3440.16E, Navy Defense Support of Civil Authorities Program, which only provides cost reimbursement guidance that directs reimbursement but does not provide process information (CNO, 2016).

The Marine Corps issues Marine Corps Order (MCO) 7300.21B, Marine Corps Financial Management Standard Operating Procedure Manual, which provides detailed instructions for reimbursable funding and cost tracking procedures but does not specifically address DSCA efforts (Commandant of the Marine Corps, 2015).

G. MILITARY PLANS AND ORDERS

Per the Unified Command Plan, USNORTHCOM’s AOR consists of the continental United States, the District of Columbia, Puerto Rico, Alaska, and the U.S. Virgin Islands. U.S. Indo-Pacific Command (USINDOPACOM) is the only other geographic Combatant Command with DSCA responsibility, covering Hawaii and U.S. Territories and insular areas in the Pacific region (USD(C), 2015).

The Joint Chiefs of Staff publishes a standing Execute Order (EXORD) to Service Secretaries, USINDOPACOM, USNORTHCOM, and functional combatant commands directing the preparation for DSCA activities. The order gives the geographic combatant

commanders limited latitude to authorize certain DSCA activities, directs reimbursement for DSCA work, and outlines the process for force requests (Joint Staff J3, 2018).

USNORTHCOM issues a standing Operations Order (OPORD) that delineates phases of the operation and provides a command and control (C2) construct for DSCA efforts within the continental United States. This order also provides direction for cost tracking and reimbursement, though it defers to service-specific guidance for methods of doing so. Upon the occurrence of a disaster, USNORTHCOM issues additional Fragmentary Orders (FRAGORDs) to task the service components with specific relief functions (USNORTHCOM J3, 2017).

IV. METHODOLOGY

This analysis employs both qualitative and quantitative research methods. The qualitative methods included a review of the existing publications and directives defining the process in addition to the analysis of databases and spreadsheets used for tracking purposes. Specifically, the database associated with Hurricane Harvey, DDASS, was used as a case study to select an individual large-scale event for deeper understanding. The qualitative methods used focused on individual interviews guided by process specific questions. A combination of these two research methods yielded an understanding of the process and in turn provided insight and observations into which areas pose challenges worth confronting, as described in the following analysis chapter. This chapter explains the process as established by a review of the policy and directives followed by the quantitative database driven case study of Hurricane Harvey. It ends with a description of the interviews conducted providing our baseline understanding in preparation for the observations and analysis.

A. PARTICIPANTS

To understand the reimbursement process, it is important to first have a base knowledge of the key players and their roles in this process. The following is a description of each of these players including state governments, FEMA, the Office of the Under Secretary of Defense (Comptroller), USNORTHCOM, the FMAT, the DCO, the Defense Coordinating Element (DCE), the service component comptrollers, and the individually tasked units.

State Governments—State governments provide the initial support to public safety when a natural disaster strikes. Governors have the ability to activate state National Guard units to assist during disaster events. When the resources available to the state governments, such as during a large hurricane event, are overcome the state Governor then requests federal assistance (DHS, 2016a).

Federal Emergency Management Agency (FEMA)—When a state governor requests assistance, it requires either a presidential emergency or major disaster declaration

for FEMA to act unless a declaration is believed to be imminent. The emergency declaration (EM) is more limited and can be announced to provide assistance before an event takes place but a major disaster declaration (DR) can only be announced after a disaster has occurred as it authorizes much more support. This request is routed through a FEMA regional office and the FEMA administrator before arriving before the President. Once the President makes a declaration, FEMA then has the authorization to coordinate a full federal response during a large-scale event. FEMA is broken up into 10 regional zones, as seen in Figure 1 (DHS, 2016a).



Figure 1. FEMA Regional Zones. Source: Department of Homeland Security (2016a).

Defense Coordinating Officer (DCO)—There is one DCO for each FEMA region shown in Figure 1. Generally, this is an O-6 grade officer who is familiar with the Defense Support of Civil Authorities (DSCA) mission and DoD capabilities. This person works closely with the FEMA regional office determining what services can be provided by the DoD to support the federal response. Since support normally closely relates to the Army Corps of Engineers and/or the National Guard, an Army officer's experience provides the

most value to the regional office. The DCO is also responsible for the oversight and tracking of all operational aspects of the MAs, discussed further below (OUSD(P), 2016a).

Defense Coordinating Element (DCE)—This is a multi-service team of DoD specialists who assist the DCO in coordinating with the FEMA regional office. They provide cost estimation and feasibility analysis for requests for assistance but are not permanently attached to the regional field office. With specific regards to financial management, they provide capability specific pricing information to the DCO for coordination with the regional office (OUSD(P), 2016a).

Office of the Under Secretary of Defense Comptroller (OUSD(C))—OUSD(C) provides the cost tracking guidance to the service comptrollers for a specific event. This office is responsible for the policy oversight of the service comptrollers but remains outside of the actual accounting process (USNORTHCOM J83, 2018).

United States Northern Command J3 (J3)—The operations directorate for USNORTHCOM issues orders to applicable services whose capabilities satisfy the requirements of the MAs. These orders provide the funding instructions needed for individual units to request reimbursement (USNORTHCOM J83, 2018).

United States Northern Command J83 (J83)—J83 ensures that claims against an MA do not exceed the funding authorized on the MA, serving as the approval authority for issuance of RBA by service component comptrollers. Though J83 remains outside of the funding flow, they track all RBA associated with an event to ensure the proper execution of financial management associated with the reimbursement process (USNORTHCOM J83, 2018).

Service Component Comptrollers (SCCs)—The SCCs are responsible for the issuance of RBA to the individual units or funding end users. They are responsible for coordinating with J83 the oversight of all RBA issued and claimed by their service. These comptrollers also issue service specific special purpose codes (SPCs) that are used by the individual units to track costs during mission execution (USNORTHCOM J83, 2018).

Financial Management Augmentation Team (FMAT)—The FMAT is comprised of stakeholders at various levels within the reimbursement process. This includes

specialists from USNORTHCOM, the SCCs, the Defense Financial Accounting Service (DFAS), the OUSD(C), and the J8 directorate at the Joint Chiefs of Staff. Together, this team comprises the subject matter expertise necessary to coordinate, advise, and manage RBA and claims. This team also pools recommendations for future changes to reimbursement policy. USNORTHCOM FMAT members may deploy to provide hands on management assistance during DSCA events (USNORTHCOM J83, 2018).

Units/Financial End Users (FEUs)—Units/Financial End Users (FEUs)—The term is divided between unit and financial end users because not all units have financial managers with the ability to process DSCA claims. For example, the financial manager on an amphibious ship deploying in support of a hurricane event has no involvement in the reimbursement process. The comptroller at the ship's Type Commander (TYCOM) handles all of these duties. In other services the unit is the FEU (conference). In either case, these units/FEUs are charged with the submission of cost estimates to the service level comptrollers, the receipt of RBA once issued, the submission of cost reports as missions are completed and finally the submission of a reimbursement claim (USNORTHCOM J83, 2018).

B. DOCUMENTS AND DATABASES

In addition to the key players, there are a number of documents, portals and codes that must be introduced before the actual steps of the process are defined.

Mission Assignment—A Mission Assignment, shown as Figure 2, is a document issued by a FEMA regional office that requests services or support from another federal agency when they cannot meet these needs at a lower level. These MAs contain funding limitations, a description of the task/capability needed, and the timeframe desired (DHS, 2016b). This document provides the reimbursable budget authority (RBA) allowing the DoD to provide the requested services on a reimbursable basis. RBA is issued to the DoD but the MA does not provide obligation authority to any specific unit. SCCs issue DSCA Reimbursable Authority Documents (DRADs), discussed in detail later in this section, that allocate obligation authority to specific units.

DoD DSCA Automated Support System (DDASS)—DDASS is an online database used by the DCO/E to manage MAs after they are issued from the FEMA regional office. Although the DCO is the primary user, this portal is used by members of the FMAT for situational awareness on which MAs have been issued and the amount of RBA issued against each MA. Additionally, the service comptrollers use the financial module within DDASS

DSCA Reimbursable Authority Document (DRAD)—A DRAD, shown as Figure 3, is issued by the service comptrollers to a unit/FEU to formally authorize the future claim of funds spent in support of DSCA (USNORTHCOM J83, 2018). It is important to note that the dollar value of all the DRADs associated with a specific MA must never exceed the ceiling authorized on the MA.

MA Tracker—The MA tracker is a spreadsheet used by the FMAT members, primarily within USNORTHCOM, to track the funding ceilings authorized by the MAs, and all claims against them. This manual spreadsheet is referenced each time a service level comptroller requests RBA issuance approval or modification to an individual unit (USNORTHCOM J83, 2018). The MA tracker contains additional data that DDASS will not retain if an MA is canceled or modified. It provides the authors within USNORTHCOM J83 additional tracking capabilities to fill in where DDASS's programming cannot. This process will become clearer below (USNORTHCOM J7, 2018).

Special Purpose Codes (SPCs)—SPCs are used by individual units/FEUs to codify individual expenditures in an effort to link them to a specific DSCA event. The initial direction to commence using SPCs begins with OUSD(C) but then is tailored for each specific service by a unit's/FEU's respective service component comptrollers (USNORTHCOM J83, 2018).

Operational & Fragmentary Orders (OPORDs & FRAGOs)—OPORDs & FRAGOs are released by USNORTHCOM to address the needs of DSCA. An OPORD is an overarching document that provides the overall framework for a DSCA response when executed by DoD forces in North America. This is not issued for each event but rather as a standing document for reference at any time. FRAGOs provide specific capability

guidance for the services to address the needs of an outstanding MA. J83 ensures that funding language is provided in each of these orders directing individual units to consult directly with their service component comptrollers for financial instruction (USNORTHCOM J83, 2018).

DSCA Reimbursable Authority Document (DRAD)					
Issued By:				Issue Date:	
Issued To:	Organization:				Expiration Date:
	Address:				Point of Contact:
					Point of Contact:
	Email:				Commercial Phone: Commercial Fax:
					DSN Phone: DSN Fax:
Reimbursable Authority					
DRAD #:		Rev.	Previous Balance	Issue/Change (+/-):	Revised Amount
PA/MA #:				Start Date:	
				End Date:	
PA/MA Purpose/Description:					
Specific Instructions:					
Please ensure that all costs are recorded against MDEP XXXX, FCA XXXX IAW Department of Army guidance. Incremental costs billable to FEMA include civilian overtime, per diem/travel, transportation, contract services and expendable supplies. Additional requirements apply for durable items. Pay and Allowance for reservists is reimbursable if called up solely to support the contingency and not on AT orders. Based on your estimate, the FMAT is providing reimbursable budget authority for the above PFA/MA for cost incurred under provisions of the Stafford Act. There are no direct dollars provided by this document, and unit will not direct fund cite the FEMA fund citation on any document.					
Standard Instructions:					
Ensure supporting documentation is captured and maintained to meet FEMA billing requirements. FEMA billing templates and link to FEMA billing information will be provided via email. For acknowledgement, documents or questions, please contact the ARNORTH POC at usarmy.jbsa.arnorth.list.roc@mail.mil (210)221-9507/0280. **Please provide updated status report every Friday until closure. First report due:					
Supporting Attachments:					
Reporting/Closure Instructions:					
1. Acknowledge receipt of this document to ARNORTH ROC NLT: 2. Notify your ROC POC immediately if RBA must be adjusted using "RBA Status Report" form. 3. Provide status of your estimate against actual on a weekly basis using "RBA Status Report" form. 4. Complete "RBA Closure Certification" form after expenses have been reimbursed by FEMA. 5. Forms and instructions will be provided to agency POC via email					
FMO Approval:			Date:		
ARNORTH Reimbursement Cell (ARC) POC Information					
ROC Email:			Comm Phone/DSN Comm Fax/DSN		

Figure 3. DSCA Reimbursable Authority Document.
Source: USNORTHCOM J83 (2018).

Annex A—The Annex A is a spreadsheet added as an appendix to a USNORTHCOM issued FRAGO. It contains the MA doc number, the applicable service

and unit, the assignment start and stop date, and the capability requested. It is often referenced by J83 to provide situational awareness on what units are assigned to a given MA (USNORTHCOM J7, 2018).

C. PROCESS MAPPING AND HURRICANE HARVEY DATA ANALYSIS

To address questions 1–4 of the problem statement, the project focused on the FMAT handbook to build multi-organization flowcharts depicting the authorization and claim processes. These were built to understand each step in the process while providing a clear visual separation between the roles of each organization.

As DDASS is the program of record for DSCA efforts, it was also important to examine the data that can be extracted from this database. This helped us determine whether the difference between the amount authorized and claimed could be calculated. It also provided the researchers a fundamental understanding of how the stakeholders within the process interact with the primary database.

D. INTERVIEWS

Interviews were conducted with key financial management personnel involved in the reimbursement process within the DoD. A full list of all key players was provided during the VISTA CAPITAL Table Top Exercise held in Colorado Springs, CO, from November 28–29, 2018. Representatives from each service component and from the combatant commander were present. At the exercise, participants walked through process familiarization, a walk-through of the authorization portion of the overall reimbursement process, and reviewed an upcoming training scenario. Individuals were selected by the research team based on their involvement and understanding of the process. It was essential to include members of the combatant commander, component services and the Office of the Under Secretary of Defense (Comptroller) to fully understand each role and their interaction with other roles in the process. Interviews were conducted over the phone and a written record of the responses was retained by the research team. In some cases, key forms associated with the process were referenced during the interviews that were requested by the research team for review.

Each of the questions posed focused on answering questions 5–7 of the problem statement focusing on the qualitative assessment of how clear the process is to the participants. The questions also helped the researchers in understanding where the process could be improved from the perspective of the stakeholder. The questions posed were as follows:

1. Please describe the process in which reimbursable authority (RBA) is granted. This question helped to establish whether all participants share a common understanding of the process by which RBA is granted and allocated.

2. Please describe the RBA claim process. This question helped to establish whether all participants share a common understanding of the process by which RBA is claimed and reimbursed.

3. Please describe the role of the person who grants the RBA. This question helped understanding of how the RBA grantors operate, as each service has a different process to grant RBA.

4. Please describe the role of the person responsible for the RBA claim process. This question improved understanding of how the different services process reimbursement claims from the unit level up.

5. Are there any steps in the process that are difficult to understand and/or execute? Please explain. This question provided the opportunity for stakeholders in the process to identify specific challenges and complexities.

6. Please explain what personnel are involved in completion of the granting of RBA and/or the claiming of RBA. This question helped to identify at what level each service processes RBA.

7. What resources are lacking that would facilitate a smoother FEMA funded disaster relief process? This question provided stakeholders the opportunity to identify missing resources or steps in the process.

8. What problems exist in the process? This open-ended question allowed for a broad range of feedback as to what, if any, issues existed in the overall RBA process.

9. If a problem exists, what are the impacts resulting from these problems?

This question allowed respondents to identify operational or other impacts coming from process problems.

10. What governing directives are reference in execution of these processes?

This question both pointed the research team to resources and also helped in understanding what directives were useful to process participants.

11. Are these processes effective? This open-ended question allowed for a broad range of feedback as to what, if any, issues existed in the overall RBA process.

12. Is there room for improvement in the RBA granting/claiming process? This question gave participants the opportunity to identify areas for improvement.

Upon completion of the interviews, the responses were analyzed in conjunction with the policy and database review to provide a clearer picture of the process and challenge areas. Information from the interviews will be kept for six months in electronic format.

E. CONCLUSION

The combination of the quantitative policy and data review along with the qualitative interviews demonstrate the complexity of this process. There is no single reference that defines each step, so it was imperative to piece together everyone's role to see the entire picture. The framework established deviates in some ways from the actual process and it is the intent of this study to help the theoretical align with the actual. Those deviations will be explored further in Chapter V to determine whether all the recovery services provided by the DoD are accurately reimbursed by FEMA.

V. ANALYSIS

This chapter reviews the process analysis and interview results gained through this study. These data elements aided understanding of where problems lie within the existing process. This chapter then examines data for Hurricane Harvey found in DDASS under the Mission Assignment Manager and Reimbursable Manager tools. This data provides insight as to the utility of DDASS itself and the success level of reimbursement tracking, execution, and closeout. Analysis of the data builds understanding of the factors that create closeout issues.

A. DSCA REIMBURSEMENT AUTHORIZATION PROCESS

To better understand the interaction between the multiple organizations within the DSCA reimbursement process, the study used the guidance from the FMAT manual and from several interviews to produce the flow chart in Figure 4. The following section explains the individual steps as visualized in the flow chart.

Before or after a hurricane strikes a region or a state, the state Governor(s) responsible can request that the President declares either an emergency (EM) or major disaster (DR) after the damage has occurred. The key pieces to understand with each of these declarations is that an EM declaration can be declared before the emergency actually happens but provides very limited funding, while a DR is always after the destruction has occurred providing significantly more resources (Department of Homeland Security, 2016a). After a state Governor makes their request, it is routed through FEMA before arriving on the President's desk. If the disaster has already occurred, FEMA will likely have already gone to work providing some sort of federal assistance/coordination by using a surge (SU) MA. The SU/MA is intended to fund operations from 7–10 days when there is an expectation that a Presidential EM or DR declaration is forthcoming. Once the President declares an EM or DR in the event of a large hurricane, all funding switches over to a new MA. For example, the MA code could go from XXXXSU-TX for a surge response in Texas to XXXXEM-TX in the case of an EM declaration or to XXXXDR-TX for a Texas major disaster declaration (C. Wagner, email to author, January 17, 2019).

described. Once the MA has been uploaded into DDASS it goes through a validation process that allows additional stakeholder input.

When the MA validation process is complete in DDASS, the operations directorate (J3) at USNORTHCOM then provides an approval determination before entering the data into their tracker, the Annex A. The J3 utilizes the Annex A spreadsheet as an augment to DDASS in a format where they can control the tracking of issued MAs and the associated data provided in their FRAGORDs. All the data in the Annex A is manually entered by the personnel in the J3 directorate. Simultaneously, the J83 directorate, the financial managers within USNORTHCOM, generate reimbursement instructions for inclusion into the FRAGOs being written by the J3. At this time the MA tracker, the spreadsheet previously described to maintain awareness regarding funding ceilings and RBA approval, is updated by J83 to start the oversight for the latest MA. This manual updating process includes data directly from DDASS along with data previously manually entered into the Annex A (USNORTHCOM J83, 2018).

Upon receiving the funding instructions from J83 and the completion of their orders writing process, J3 releases the FRAGOs prompting the services to write lower tier orders containing more specific instructions to their units. The SCCs then have a role to play in this layer of the orders dissemination process by providing further funding instructions to the unit/FEU. These instructions specifically include the issuance of an SPC that is generated by the SCC as previously instructed by OUSD(C). This SPC is generated specifically for each service to maintain cost tracking within a unit/FEU's accounting (USNORTHCOM J83, 2018).

In a perfect world, all of the previously describe actions would take place before a unit begins making expenditures related to DSCA support. Since a hurricane does not pause to ensure the funding instructions have been issued via the orders dissemination process, many units mobilize in advance of receiving the cost tracking instructions.

Once the units receive the funding instructions from their respective services, they begin tracking their costs and submit cost estimates to the service level comptrollers for the services and goods provided for the specific period of time established in the initial MA

(USNORTHCOM J83, 2018). The service comptroller then takes those cost estimates and forwards them to USNORTHCOM for approval or if a discrepancy is found, they can request the unit resubmit. USNORTHCOM then reviews the estimates comparing the amount to the funding ceiling authorized on the MA. The major point of concern here is to ensure there are no Anti-Deficiency Act violations that claim more reimbursement than initially authorized by FEMA. If the cost estimate surpasses that which was authorized on the MA, J83 can request the MA be modified to include a higher ceiling. Along with this modification would come additional manual data entries subject to error. If J83 approves the cost estimate submitted, they notify the SCC and make a manual RBA approval entry in the MA tracker (USNORTHCOM J83, 2018).

Once the SCC receives the approval, the next step is to issue RBA via the creation of a DRAD. This document is generated by the SCC to provide authorization to the unit/FEU to submit reimbursement claims against a specific MA. Once the DRAD is generated, the service comptroller also has the duty of entering the information contained on the document into DDASS. Once DDASS has been updated by the SCCs, the MA tracker and DDASS will match. If it is discovered that they do not match the FM personnel in J83 begin to investigate the reason. The unit then continues the mission while tracking their costs until their mission is complete and they are ready to submit a claim for reimbursement.

B. REIMBURSEMENT CLAIM PROCESS

Figure 5 shows each step in submitting a claim. Once a unit has completed a specific mission, the first step in the claim process is their submission of cost reports to the SCC. The comptroller then compares these cost reports to the RBA provided in the DRAD to ensure that the amount claimed does not exceed the amount authorized. The SCC will then modify the issued DRAD to reflect only the amount being claimed. OUSD(C) and J83 receive notification of the cost report and DRAD modification. J83 then enters the new amount of the DRAD into the MA tracker and DDASS to maintain oversight of the potential claims against an MA and ensure reconciliation between the two tracking tools (USNORTHCOM J83, 2018).

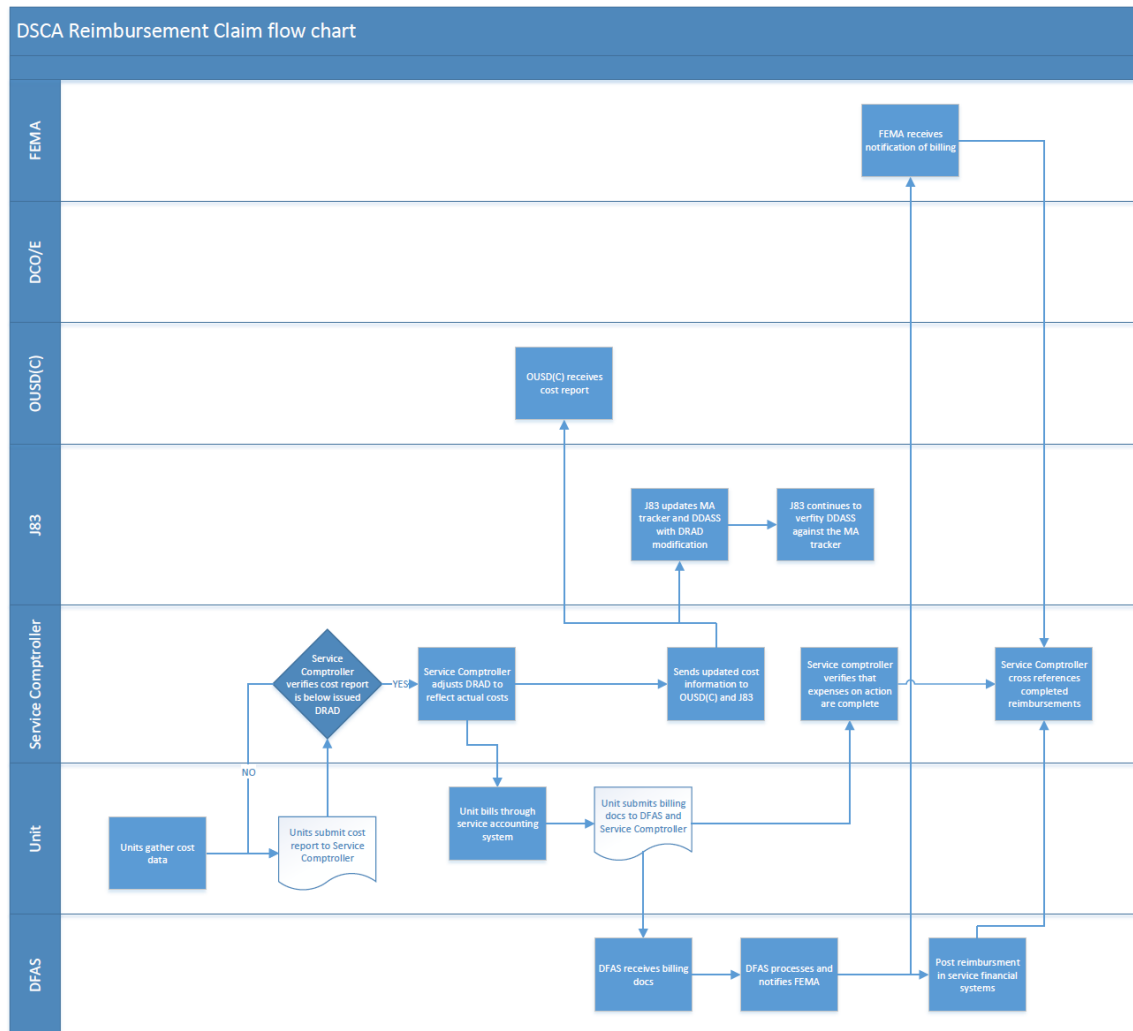


Figure 5. Reimbursement Claim Flowchart

Once the service component comptroller modifies the DRAD to reflect the cost report submitted by a unit, the unit then can submit their reimbursement documents to DFAS for the final step of processing the claim. This process can vary by services and will be explained specifically for each service here.

C. SERVICE SPECIFIC RBA PROCESSES

The general RBA process is described in figures 4 and 5. However, each service has certain differences in how the process is completed. The following paragraphs shed light on the similarities and differences between the services. For instance, all services have to fill out the same claim forms to submit to FEMA for reimbursement. In addition to a

copy of the DRAD and MA the required forms are the DoD billing template, FEMA Form 116-0-2 and Standard Form -1080. The major difference between the services are at which level this claim package is prepared and submitted.

1. Navy RBA Process

The RBA process for the Navy begins at NAVNORTH/U.S. Fleet Forces Command, the acting SCC for the Navy in this process. The NAVNORTH DSCA lead monitors the daily USNORTHCOM operations sync tele-conference, the Chief of Naval Operations (CNO) operation/intelligence brief and communicates with U.S. Fleet Forces financial management office for situational awareness. This monitoring alerts NAVNORTH of units deployed or preparing to deploy in response to an event.

a. Issuance

After a unit has deployed or received prepare to deploy orders NAVNORTH reviews DDASS to find the corresponding MA for the event. Once an MA has been promulgated NAVNORTH sends the RBA cost estimate worksheet to the appropriate Type Commander (TYCOM); Commander, Naval Surface Force Atlantic (SURFLANT), Commander, Naval Air Force Atlantic (AIRLANT) or Navy Expeditionary Combat Command (NECC). The TYCOM will complete the cost estimate and return it to NAVNORTH. This estimate is forwarded to USNORTHCOM for approval. Once approved, NAVNORTH will create the DRAD and forward it to the comptroller at the appropriate TYCOM. Costs will then be monitored. In the event that additional RBA is necessary the process begins again with another RBA request (W. Maurer, email to author, January 16, 2019).

b. Claim

After the operational unit completes the assigned service requirement the responsible TYCOM fills out the necessary paperwork to claim reimbursement. This package will be reviewed at the TYCOM level for completeness and accuracy. The TYCOM will forward the package to FMAT personnel at NAVNORTH. It will again be reviewed for completeness, accuracy and if the claim is appropriate and substantiated. A

substantiated package will be forwarded to FEMA for billing. If approved by FEMA, DFAS will pay the claim and reimburse the TYCOM (W. Maurer, email to author, January 16, 2019).

c. TYCOM

Under the Navy framework the TYCOM carries out most of the practical financial duties associated with DSCA, the estimates and claim processes. After receiving tasking from NAVNORTH the TYCOM will find out which units have received or may receive prepare to deploy orders (PTDO) in support of the DSCA event. The TYCOM will complete the Reimbursable Authority Estimate (RAE) for the requested service(s) and submit to NAVNORTH and wait for a DRAD. Once the DRAD is received the TYCOM is free to make claims against it. The Navy FEU will be contacted by the respective TYCOM Financial Management Analyst (FMA) and given a cost template workbook to capture the specific costs associated with the DSCA work provided by the unit. This template is submitted to the FMA daily during an event. In turn the FMA will report to the NAVNORTH lead for a prescribed time period. Upon completion of an event the TYCOM completes and submits the reimbursement package and forwards it to NAVNORTH for review and submission to FEMA for reimbursement (A. Courtney, personal communication, January 28, 2019).

2. Army RBA Process

The RBA process for the Army begins at ARNORTH. ARNORTH G8 is the Army SCC tasked with DSCA financial reporting responsibilities, but the financial management processes associated with DSCA work are pushed down to the actual unit completing the work. Once an Army unit is tasked with an MA and requests RBA the unit will receive guidance from an ARNORTH FMAT member on the process (K. Devlin, email to author, January 28, 2019).

a. Issuance

Upon confirmation of assignment, the unit completes the RBA cost estimate and submits it to ARNORTH. The estimate is forwarded to USNORTHCOM for approval.

After approval ARNORTH issues the DRAD providing RBA to the unit. Along with the DRAD, ARNORTH provides the SPCs that are to be used for tracking/execution purposes. An instruction packet which includes the MA and all the templates necessary to assist the unit in the execution of RBA is also provided. The unit establishes a special reimbursable account within its financial management system that displays the amount of RBA that has been allocated to the unit. The account is generally established as a Reimbursable Sales Order (RSO). The unit also requests Funding Reimbursable Authority (FRA) from its higher headquarters. Within the Army this is the authority to receive funding from an outside agency, the DRAD in a DSCA event. After the DRAD is issued the tasked unit and ARNORTH will only have interaction if there is a requirement to change the RBA, an increase or decrease. From this point the financial management is the responsibility of the unit. The unit may report status to higher headquarters but there is no requirement to report to ARNORTH until a claim is paid in full (L. Haley, personal communication, February 1, 2019).

b. Claim

The unit tracks and compiles costs and is responsible for the claim to FEMA. After completing the DSCA work the unit will complete the billing packet submit to both DFAS and FEMA simultaneously. Once the unit has received complete reimbursement (the unit may make incremental claims or wait until all work is complete) it is required to alert ARNORTH so that the FMAT member can close out the MA with FEMA. The ARNORTH FMAT member will require a screen shot from the financial management system as documentation the claim has been paid in full (K. Devlin, email to author, January 28, 2019).

3. Marine RBA Process

The RBA process for the Marine Corps begins when an MA is issued to Marine Forces Command (MARFORCOM). As the force provider MARFORCOM determines where to source the requested capability(s) and issues a tasking order to assign a unit, to provide the requested support. The funding instructions required to carry out the DSCA

work will be provided by MARFORCOM G-8 (A. Harrison, email to author, February 8, 2019).

a. Issuance

After receiving a tasking order, the FEU fills out the RBA cost estimate worksheet and forwards it to Headquarters Marine Corps, Programs and Resources (HQMC P&R). The cost estimate is then forwarded to USNORTHCOM for review and approval. Upon USNORTHCOM approval HQMC P&R creates the DRAD and issues it to the FEU via the unit's chain of command. Once received the FEU establishes a Reimbursable Order Number (RON) in its financial management system citing the appropriate fiscal information from the DRAD and tracks costs associated with DSCA work (A. Harrison, email to author, February 8, 2019).

b. Claim

Repeated attempts to reach a U.S. Marine Corps subject matter expert for the DSCA claim process were unsuccessful. Based on the 100% closure rate of Hurricane Harvey DRADs for which the Marine Corps was responsible it may be presumed that a claim process is in place.

4. Air Force RBA Process

The RBA process for the Air Force involves begins at the Secretary of the Air Force, Financial Manager (SAFFM) and involves Air Force SCCs and the actual units that perform the requested service.

a. Issuance

Upon receiving an MA, the assigned unit will complete the RBA cost estimate worksheet and submit it to SAFFM. The cost estimate will be reviewed, validated then forwarded to USNORTHCOM for further review and validation. Once validated USNORTHCOM J83 will approve the cost estimate and return it to the SAFFM. SAFFM will then issue the DRAD to the unit along with the appropriate SPC. The unit's SCC will load the RBA and SPCs into the Defense Enterprise Accounting and Management System

(DEAMS). The unit is then able to build a contract within DEAMS that allows the unit to create billing events which are the instances of RBA execution. The unit may now execute the mission making claims against the RBA (K. Jackey, personal communication, March 4, 2019).

b. Claim

The Resource Advisor (RA), the unit's financial manager, tracks and compiles costs, and is responsible for the claim to FEMA. After the unit completes the DSCA work, the RA completes the billing event in DEAMS and the FEMA billing packet. DFAS is alerted directly via DEAMS but the FEMA packet is submitted separately to FEMA by the RA as FEMA notification is necessary. During the DSCA event the unit has no reporting requirement to the SCC or SAFFM as each has DEAMS access and can view the RBA rate of execution, if any. Once the unit receives reimbursement from FEMA it alerts its SCC. The SCC in turn alerts SAFFM who will then close the DRAD (K. Jackey, personal communication, March 4, 2019).

D. HURRICANE HARVEY DATA

Examining data from a past DSCA event can aid in understanding what issues exist with the transitions from MA to DRAD to reimbursement, and ultimately to MA closeout. Through metrics derived both directly from DDASS and calculated from available DDASS data, Hurricane Harvey is used as an illustrative example of existing issues.

1. Mission Assignment Manager

The Mission Assignment Manager in DDASS is designed for Defense Coordinating Officers (DCOs) and other parties to track the approval process of MAs. The MA Manager provides a snapshot view that can be filtered by incident, and displays a brief summary of information pertaining to each MA, or in the case of multiple Mission Assignment Task Orders (MATOs), each MATO. Much of the information is not wholly relevant to FM operations, but the far-right color-coded column, entitled "FUND" displays a percentage of funds used; this percentage is calculated by dividing the estimated expenses under the

MA/MATO by the total Obligation Authority (OA) provided by the original MA and subsequent amendments.

2. Reimbursable Manager

The Reimbursable Manager in DDASS is designed for use by Service Comptrollers and FMAT members to view and update financial statuses for MAs. The view may be filtered by incident and contains information both about the MA and DRADS associated with MAs. If there are multiple DRADS per MA, each DRAD results in an additional line of data in the snapshot view. Unlike the MA Manager, the Reimbursable Manager does not identify MATO numbers. There is not a “stoplight” (red/yellow/green/) chart within the Reimbursable Manager view to quickly identify which MAs and/or DRADS are open or closed. At the bottom of the view, a summary of total Reimbursable Authority from FEMA is shown, along with the total Reimbursable Authority issued to DoD units (via DRADS), and the overall Reimbursable Authority not yet issued to DoD units. This summary is shown for the filtered data that the user has selected.

3. MA / Reimbursable Editor

From either the MA or Reimbursable Managers, a DDASS user can open a detailed editor for each MA. The viewing options are identical from both managers though varying permissions permit different editing rights for individuals. It is within this editor that updates are made to the tracking data shown on the main manager screens. The SU/RFA, EM and DR tabs are the financial tabs within the editor, with other tabs used for DCO/E coordination. It is important to note that the “actual expenditure” shown includes costs on open DRADs, which means that expenditures have not been finalized; open DRADS represent reimbursable authority that may or may not have expenditures tied to it. DRAD details, including issuer, recipient, and recipient point of contact, are found in these tabs.

4. DDASS Reports

a. MA Manager Excel Output

A DDASS user can generate a Microsoft Excel report from the MA Manager view. This report includes most of the information from the MA Manager screen, but omits the

“stoplight” portion of the screen. The report does provide financial data that does not show up on the MA Manager screen, including Obligation Authority (OA) and estimated expenditures for each MA and MATO. However, the OA shown is only the initial amount provided for an MA, but does not include subsequent amendments. Thus, the estimated expenditures shown on the report may exceed the OA shown for a particular MA or MATO. While this is not immediately apparent, there is a listing of amendments provided in the report. The report is presented in standard spreadsheet format which allows for easy sorting and filtering. However, with financial data limited to that discussed above, the MA Manager report is of limited utility to Financial Managers.

b. Reimbursable Manager Excel Output

The Reimbursable Manager also produces a Microsoft Excel report. Unlike the MA Manager report, the Reimbursable Manager report completely re-arranges the data in a format not conducive to filtering and sorting. The report shows data for each DRAD and the overall MA, including cost and closeout information. However, MATO numbers are not referenced in the report.

5. DATA Limitations within DDASS

A comparison of the MA Manager and Reimbursable Manager reports brings up data discrepancies which could hinder effective financial management operations. First, the “estimated expenditure” value shown on the MA Manager report does not always match the actual expenditures shown on the Reimbursable Manager report or view screen. This can be seen in Hurricane Harvey DRAD 4332DR-TX-DOD-02-57-02, under MA 4332DR-TX-DOD-02, where estimated expenditures in the MA manager show \$459,382.80, but the Reimbursable Manager shows actual expenditure of \$449,382.80. For Hurricane Harvey, it appears that this is the only discrepancy; DDASS does not allow the user to drill down and determine the source of the discrepancy. Second, the number of MAs shown in the different manager screens is not always the same. For Hurricane Harvey, the MA Manager screen and report display five more MAs than the Reimbursable Manager. While infrequent, the presence of one discrepancy may indicate the presence of others.

A limitation of the system appears to be Defense Logistics Agency (DLA) funding; while there are five MAs issued to DLA, one with estimated expenditures per the MA Manager, there is no record of tasking, RBA issuance or actual expenditures in the Reimbursable Manager or Editor functions of DDASS. On the MA screen, portions of the stoplight chart are blacked out for the DLA MAs. While this occurs with other, non-DLA MAs, coordination records within the Editor screen show that these were canceled; the DLA MAs show no such records. With MAs issued directly to DLA, it appears that the ordinary FMAT and DCO/E members that complete the DDASS process do not work on DLA-tasked MAs.

Determining the final cost of an event via DDASS data is also a limitation, though not wholly of the system itself. Data pulled from the Reimbursable Manager includes open MAs and DRADS; until these are closed, costs should not be considered final. A cursory review of prior fiscal years from 2008 through 2018 indicates that open MAs exist for all fiscal years, though not necessarily all incidents. Were all MAs closed and all financial data input correctly into DDASS, cost reporting would be possible; however, this is not currently the case.

6. Hurricane Harvey Metrics

Various metrics can be extrapolated from DDASS Reimbursable Manager data. The following metrics were generated by re-arranging data pulled from the Reimbursable Manager Report and then performing basic calculations upon that data to create metrics.

a. Issued Reimbursable Authority (RA) to Total RA Ratio

A wholistic metric that can be easily derived is the ratio of issued RA to total RA. This is found by totaling the issued DRADs and the total RA behind each MA. These numbers are also found as a summary at the bottom of the Reimbursable Manager screen. Another useful comparison is looking at overall annual figures. Table 1, shows Hurricane Harvey's data with annual data from 2008 through 2018. Note that this data excludes foreign disaster relief that appeared in DDASS. As can be seen, the ratio of issued to total RA for Hurricane Harvey is small in relation to annual figures. However, this number, though convenient to calculate and brief, does not convey significant meaning, as it

essentially serves as a ratio of detailed cost estimate figures to Rough Order of Magnitude (ROM) cost estimate figures. This is because of the process; the overall RA, based on MA dollar amounts, is generated through ROM estimates worked by FEMA and DCO/E staff in a short timeframe. DRAD issuance is based on detailed estimates by executing service components, and serves as the basis for the amount of RA actually issued. The actual expense is the most accurate figure, and DRADs are ultimately adjusted to match the actual expense once work is complete. A large disparity between these figures is to be expected. The larger the incident, the less time available for DCO/E staff to estimate, and the larger the error margin on the ROM estimate. In an emergency environment where the RA issuing authority (FEMA) is more concerned with response time than cost, it is better to overestimate than to underestimate when issuing an MA. Table 1 is thus of little utility in evaluating the effectiveness, or facilitating the completion, of financial management operations. It should be noted that no governing document studied describes the differences in estimating or anticipates discrepancies in dollar amounts, but the nature of the DSCA RA authorization process drives the differences.

Table 1. RA Issued to Total RA Ratios. Adapted from DDASS (n.d.).

Incident / Fiscal Year	Total RA	RA Issued	RA Funds Issued as Percentage of Total RA
Harvey	\$165,331,055	\$11,570,750	7.0%
2008	\$237,357,544	\$11,601	0.0%
2009	\$15,720,716	\$0	0.0%
2010	\$67,668,847	\$0	0.0%
2011	\$21,417,133	\$1,423,288	6.6%
2012	\$87,103,619	\$24,294,155	27.9%
2013	\$815,920	\$66,606	8.2%
2014	\$296,991	\$6,393	2.2%
2015	\$179,717	\$21,900	12.2%
2016	\$2,249,989	\$282,145	12.5%
2017	\$857,349,987	\$210,857,871	24.6%
2018	\$171,430,260	\$6,642,895	3.9%

b. MA Figures from DDASS

From the Reimbursable Manager report, one can derive several metrics pertaining to MAs. Starting with a simple count, the number of open and closed MAs compared to the total number of MAs for an event may be calculated. For Hurricane Harvey, we can see that, by count, 24 of 35 total MAs, or 68.4%, in the Reimbursable Manager view are still open, with the remainder closed. This provides a basic idea of how the financial closure process is functioning. However, this simple metric does not help explain why the MAs remain open. We can gain additional insight into the “why?” question by looking at MAs for which no DRAD was issued; that is to say that FEMA provided RA to the DoD, but no subsequent allocation of that RA was made to a specific unit. Of all MAs, 16 had no DRADs issued. Of these, five have been closed; 11 remain open. Assuming that a lack of DRAD issuance means that no funds were needed (no mission execution occurred), closure should be feasible by validating that no work was performed by the DoD. We next look to MAs that are open, but all DRADs attached to the MA have been closed. This constitutes five in number, or 14.3% of all Hurricane Harvey MAs. These should be simple closures as the allocated DRADs have been closed.

Also note that the same data can be calculated using the fund amounts attached to the MAs and this calculation is shown in Table 2 alongside the counted figures.

Table 2. MA Data for Hurricane Harvey. Adapted from DDASS (n.d.).

MA Data Totals for Hurricane Harvey	RM Manager Count	Count Percentage of total MA	RM Manager Cost	Cost Percentage of total RA
Open MA (all MA)	24	68.6%	\$164,941,112.00	99.8%
Closed MA (All MA)	11	31.4%	\$ 389,942.59	0.2%
Total MA Numbers	35	100.0%	\$165,331,054.59	100.0%
MA with no DRAD Issued	16	45.7%	\$143,596,375.00	86.9%
Open MA with no DRAD Issued	11	31.4%	\$143,596,375.00	86.9%
Closed MA with no DRAD Issued	5	14.3%	\$ -	0.0%
MA open where all DRAD closed	5	14.3%	\$ 3,587,703.00	2.2%

7. Organizational Breakdown of DDASS Data

It is also useful to break down DDASS data by organization - in this case, by Agency, Combatant Command, or Service Component. Because each organization has a

different method of allocating, tracking, and resolving RA issued to them, insight may be gained by looking at the organizations separately. Since the individual organizations are responsible for tracking and closing DRADs, the data is broken down by DRAD instead of by MA and is shown in Table 3. Of note, the Marine Corps is the only organization to close all issued DRADs, and DLA shows no issued DRADs against their MAs. DLA's MAs together account for nearly \$143.5M, significantly skewing the funded amount metrics reviewed in Table 2 as these five MA funds comprise the vast majority of all open MAs. To complicate matters further, some DRADs are only one of multiple under an MA; if one DRAD is open but the others closed, the MA cannot be closed.

Just as looking at MA data alone does not fully depict the status of Financial Management operations, neither does looking only at DRAD data.

Table 3. DRAD Data by Organization. Adapted from DDASS (n.d.).

DRAD Data by Receptient of D-RAD	DRAD Closure Count (where a numbered DRAD was issued)	Count Percentage of Organization Total	RM Manager DRAD Amounts	Cost Percentage of Organization Total	Notes
Army Open	8	47.1%	\$ 3,510,953.61	81.4%	
Army Closed	9	52.9%	\$ 801,754.67	18.6%	
Army Total	17	100.0%	\$ 4,312,708.28	100.0%	
Navy Open	1	20.0%	\$ 2,030.64	0.1%	
Navy Closed	4	80.0%	\$ 3,610,520.74	99.9%	
Navy Total	5	100.0%	\$ 3,612,551.38	100.0%	
Air Force Open	4	57.1%	\$ 851,926.69	65.7%	
Air Force Closed	3	42.9%	\$ 444,722.48	34.3%	
Air Force Total	7	100.0%	\$ 1,296,649.17	100.0%	
Marine Corps Open	0	0.0%	\$ -	0.0%	
Marine Corps Closed	3	100.0%	\$ 259,221.26	100.0%	
Marine Corps Total	3	100.0%	\$ 259,221.26	100.0%	
TRANSCOM Open	2	66.7%	\$ 82,000.00	4.0%	
TRANSCOM Closed	1	33.3%	\$ 1,977,073.00	96.0%	
TRANSCOM Total	3	100.0%	\$ 2,059,073.00	100.0%	
DLA Open	0	0.0%	\$ -	0.0%	DLA has 5 open MAs with no DRAD issued, totaling \$142,506,375
DLA Closed	0	0.0%	\$ -	0.0%	
DLA Total	0	0.0%	\$ -	0.0%	
NORTHCOM Open	1	33.3%	\$ 58.50	0.2%	
NORTHCOM Closed	2	66.7%	\$ 30,488.54	99.8%	
NORTHCOM Total	3	100.0%	\$ 30,547.04	100.0%	
All Organizations Open	16	42.1%	\$ 4,446,969.44	38.4%	Note: total does not include closure where no DRAD issued
All Organizations Closed	22	57.9%	\$ 7,123,780.69	61.6%	
All Organizations Total	38	100.0%	\$ 11,570,750.13	100.0%	

a. Removing DLA Data

Because DLA accounts for such a large proportion of un-issued RA, and the aforementioned DDASS limitations prevent an in-depth examination of DLA D-RADs or other coordinating documents, it is useful to analyze the overall MA data presented without the DLA MA data. DRAD data remains unchanged as there are no DRADs issued for DLA MAs. This data is shown in Table 4. Outside of DLA, the number of open MAs drops by five, and the dollar amount drops by \$142.5M. Still, 63.3% of non-DLA MAs remain open. Going back to the DRAD data, however, shows that only \$4.46M in issued DRADS are open, while there are \$22.4M in open MAs. This suggests that the large dollar amount in open MAs is likely due to the expected delta between the ROM estimate used for MAs and the detailed estimates used by tasked units, along with the inevitable situation where an MA is issued but the requirement is cancelled and no funds are expended.

Table 4. MA Data Excluding DLA Mas. Adapted from DDASS (n.d.).

MA Data Totals for Hurricane Harvey Excluding DLA MAs	RM Manager Count	Count Percentage of total MA	RM Manager Cost	Cost Percentage of total RA
Open MA (all MA)	19	63.3%	\$ 22,434,737.00	98.3%
Closed MA (All MA)	11	36.7%	\$ 389,942.59	1.7%
Total MA Numbers	30	100.0%	\$22,824,679.59	100.0%
MA with no D-RAD Issued	11	36.7%	\$ 1,090,000.00	4.8%
Open MA with no DRAD Issued	6	20.0%	\$ 1,090,000.00	4.8%
Closed MA with no DRAD Issued	5	16.7%	\$ -	0.0%
MA open where all DRAD closed	5	16.7%	\$ 3,587,703.00	15.7%

8. MA Tracker Spreadsheet

This tracker, maintained by USNORTHCOM J83 as previously described, contains information pertinent to the financial management operations associated with MAs.

During Hurricane Harvey, an early version of this tracker was used; this early version contains fewer data elements than the tracker used today, though it includes text from the MA and costs per MA listed as original and following amendment amounts. In this format, it can be seen where amendments were made to increase and close out MAs. Dated February 2018, it indicates a total cost of \$122,535,228.98, which does not correspond with DDASS information. Of particular note, there are comments on the

spreadsheet indicating discrepancies with a FEMA tracking spreadsheet and with DDASS data. The spreadsheet also contains MAs that no longer exist in DDASS.

The new MA tracker was not used for Hurricane Harvey, but notes within a spreadsheet for recent events shows that discrepancies within DDASS are known; the MA tracker provides additional clarity for FMAT members that DDASS cannot. Notes in the MA Tracker indicate tasks switching from one MA to another, MAs generated to track existing DRADs, and changes between SU/EM/DR MA types for the same requested support function. Within DDASS, there is no single report that provides these data elements.

E. OBSERVATIONS AND CHALLENGES

This section reflects on the data and what areas create challenges within the process in an effort to select the most glaring concerns. The purpose is not to identify every concern point but rather highlight the areas that if improved, could yield the most benefit.

1. MA Continuity

At the beginning of the authorization process, an MA that begins as a surge (SU) MA can switch to a major disaster (DR) MA after declared by the president. A scenario that often occurs is that a unit will receive RBA and will go forth in executing those requirements all citing the initial SU MA. At the time when the president declares a major disaster, the source document for a mission in progress changes to a DR MA. The proper documentation once a DR MA is created would be to grant RBA again to those units executing the mission so that their period of performance is extended as provided by the presidential declaration. Note that the SU MA only provides a short period of RBA while the DR MA provides a much longer period of funding.

This creates challenges in tracking the proper MAs at the unit, SCC, and USNORTHCOM levels. For many units conducting operations during hurricane events, their source document can switch from the SU MA to the DR MA without their knowledge and while their mission is underway. Many unit level financial managers and FEUs do not have the level of familiarization necessary to navigate this challenge. If a unit begins their

mission under the source document of a SU MA then switches to a DR MA, it is unclear how the unit should expect to be reimbursed by a prorated amount associated with each source document.

2. Manual Entry and Cross Referencing

The entire processes for both the authorization and reimbursement are full of manual entries. DDASS, the MA Tracker, and the Annex A all contain manually entered data. These databases contain many pieces of redundant information but the specialized information that is utilized by each author is necessary to track the process appropriately. The challenge with having several partially overlapping databases is the need for continuous cross-referencing. If inconsistencies arise between the MA tracker and DDASS after USNORTHCOM has granted approval for RBA to the SCC, but before the SCC has issued the RBA to the unit and has made the update in DDASS, manual review is the only method to identify the inconsistency. No alert exists that pairs DDASS and the MA tracker to easily identify discrepancies. This process is tedious and demands the inefficient use of labor at the SCC and USNORTHCOM levels to continually cross-reference manually entered databases.

SCC's have little ability to verify correct payment from FEMA to a unit. At the last stage of the process, when the SCC is trying to determine what units have been reimbursed, another cross-reference takes place between the MA tracker and a document provided by FEMA. This document contains the liquidated and unliquidated obligations associated with a given MA. The SCC takes this document and compares it with their records as shown in DDASS to determine which units have been paid. The only piece of continuity between the unliquidated obligations document and DDASS is the amount claimed. If this number does not match, the SCC has no idea if FEMA paid the unit a different amount or if a payment was made at all (K. Devlin, personal communication, January 29, 2019).

3. SCC Unit Execution Awareness

From the vantage point of the SCC, determining what units have executed reimbursable expenditures can be difficult to assess. A sometimes-false assumption is to believe that all units who have received RBA must have executed some type of expenditure

that is reimbursable. Talking points discussed during the VISTA CAPITAL exercise address this assumption. The example that was given was the case of a search and rescue MA where RBA had been granted to a unit to conduct search and rescue operations if necessary. When the necessity for such operations did not arise, the situation left a RBA document outstanding with no claims against it since no SAR operations were conducted (USNORTHCOM J7, 2018). This makes it difficult for the SCCs to determine what other units actually conducted operations if no reimbursement claims are made against an RBA document. The importance of this point is to understand that the SCC cannot make the assumption that all RBAs will result in claims, therefore the due diligence and tedious cross-referencing necessary are identified as a challenge point in this study.

The process requires units and FEUs to make contact with the SCC in order to request RBA and execute a claim. The contact information for the SCC is provided in the orders but the multitude of unit/FEU financial management POCs are not readily available to the SCC. This is a single point of failure that relies on the unit/FEU's FM personnel to comply exactly to the contact instructions found in the orders. If this does not occur, the RBA will not be issued and if a unit expends funds it will be via DBA on a non-reimbursable basis. Additionally, if that initial contact is not made, the SCC has no single point of reference to determine if a unit did expend funds associated with an outstanding MA. The close and continued contact between the unit/FEUs and the SCC is a challenge area that if improved, could greatly improve in the accuracy of the final cost capturing.

4. Service Specific Instructions and Training

While the FMR and many DoD publications cover the topic of DSCA, only the FMAT manual covers the process in enough detail for the SCCs to understand the details of their role in the process. Although the FMAT manual provides guidance to the SCCs, this study was unable to find FM service specific policy for DSCA reimbursement that could be used by the unit level. The process from the SCC down relies on SCC POC dissemination via the orders process that will then provide instructions to the units once that contact is made. The instructions to the units are in some case via email guidance that is only disseminated to those units who make initial contact (K. Devlin, personal

communication, January 29, 2019). There is no document that is disseminated service wide to unit/FEU FM personnel that provides specific instructions for that service on the specific FM steps of the DSCA reimbursement process.

This observation falls closely in line with many recommendations received during our interviews. The comments regarding how might the process be improved often yielded the topic of training at the unit level (K. Devlin, personal communication, January 29, 2019; W. Maurer, email to author, January 16, 2019). Yet the study observed the absence of documents that could provide service specific training to each unit. Unit/FEU familiarization with the process is imperative and is viewed to be an area that could be greatly improved. The current base knowledge at this level is believed to be low. It can be speculated that this is a result of turnover, infrequent DSCA events, and a lack of service specific guidance geared to the unit/FEU level of understanding.

5. Expectation Management

From various interviews and the Vista Capital exercise, it was apparent that expectation mismatch occurs between different entities involved with the DSCA reimbursement process. At the highest level is an assumption that OUSD (C) will issue Special Purpose Codes (SPCs) for each DSCA event, and personnel from the service component level and below wait for such codes, noting that cost reporting guidance is typically days to weeks after the first MAs are issued (USNORTHCOM J7, 2018). However, at the OUSD (C) level, SPC guidance will only be issued if OSD desires tracking costs for a particular event. In the absence of OSD interest, OUSD (C) will not issue SPCs (Barbara Buteau-Pierre, 2019), but this does not prohibit nor prevent service components from implementing their service-specific tracking mechanisms. For non-SPC guidance, the FMR and standing instructions, manuals, and directives provide the necessary guidance for service components to execute DSCA reimbursable funding.

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VI. CONCLUSION

This chapter presents recommendations and a summary of finding from the study, along with suggestions for future research.

A. RECOMMENDATIONS

The following recommendations are provided to address several challenges identified in Chapter V.

1. Service Specific Desk Manuals for Units/FEUs

This study recommends the creation of service-specific desk manuals geared toward users at the unit and FEU level to define a standard process and improve unit understanding of their role. This area exhibits institutional weakness within the services. The pieces of this process that create the largest challenge is the final interaction between the unit/FEUs and the SCCs. Some units understand their role and their required interaction with their respective SCCs but those units are believed to be the minority. The best way to get the greatest amount of understanding disseminated among those units who are lacking would be to create a desk manual that could be referenced by each unit. Each respective manual would seek to achieve:

a. MA Continuity

As previously described in Chapter V, MA continuity creates problems by creating source document changes during the execution process. These issues can be overcome provided every organization within the process understands and expects those document changes. The desk manual could describe the general reasons for the changes, how to anticipate those changes while providing instructions how to reference the proper MA during a claim.

b. SCC Unit Execution Awareness

While the desk manual would not immediately solve all of the challenges associated with the SCC's understanding of which units are performing what actions, the manual

would improve the communication lines between the SCC and the unit/FEUs thereby increasing the overall execution awareness. It would also spell out the mechanism established to track unit execution in the future.

c. Key Performance Expectations

Since DSCA related events occur infrequently, many unit financial managers are unaware of what is required of them. A desk manual would spell out these requirements greatly aiding the SCCs in the performance of their oversight. Absent a desk manual, a unit financial manager would be required to wade through numerous high-level documents that do not provide the expectations clearly at their level. It would remove the necessity of expert specific and experience driven knowledge by replacing it with service policy.

d. Training

The desk manual would provide source material if FM specific DSCA training requirements were established in the future assuming training does not currently exist. If training at the unit/FEU level is currently conducted before events take place, it would provide a consolidation of topics appropriate for that audience.

Just as the FMAT manual provided clarity in the relationships at the higher echelons of this process, so too could service specific manuals that more clearly define protocol at the SCC to unit level. Further comments are made at the end of this chapter related to NPS future research associated with this recommendation.

2. Expectation Management

The recommendation to the SCCs is to lean forward and assign SPCs in the absence of direction from OUSD (C). The recommendation to OUSD (C) is to clearly state whether or not a DoD-wide SPC will be issued, ideally at the time of the initial DoD request. This would prevent confusion at the onset of a DSCA response.

3. Metrics that Matter

The recommendation is to stop using the metric comparing reimbursement requested to total RBA issued and replace it with metrics that more accurately gauge reimbursement process effectiveness:

- Total MAs closed (simple count) as compared to the total number of MAs issued. This metric comes with the caveat that an MA with multiple DRADs might be open because of one, or multiple DRADs.
- The total number of open DRADs as compared to the total number of DRADs issued. It is important to compare the simple count of open DRADs in addition to the dollar amounts as a single large DRAD could skew a dollar-based metric.
- The total reimbursement (in dollars) as compared to the total amount issued in DRADs. This figure compares reimbursement to the amount of RBA actually issued by SCCs to operational units, which is based on more detailed estimates than those prepared for MA issuance.
- DRAD metrics (both in dollar terms and simple count) by service. It is key to note that the services are responsible for submitting reimbursement claims and closing DRADS, not USNORTHCOM. This metric provides a method for evaluating the progress of each responsible service towards obtaining reimbursements.

4. Unclear Guidance

Recommend clarifying language to the DoD FMR Vol 11A, Chapter 19, and to JP 3–28 to provide a definition of incremental costs, ideally with examples that depict a situation where a unit had already planned flight hours during the DSCA response.

Additionally, recommend adding a note to paragraph 2.c.(13) of DoDI 3025.23, Defense Liaison with Civil Authorities specifically tasking the DCO with MA closure in DDASS.

B. QUESTIONS

To summarize the results of this analysis, the original research questions are presented with the results found during the study.

1. Question 1

If the DoD is not executing the full reimbursable authority granted by FEMA for the services rendered and is instead using authority from the DoD budget, what are the factors leading to, and consequences of, not doing so and can this be calculated?

The major factor identified in possible discrepancies between actual costs incurred and reimbursement requested are a lack of process knowledge at the FEU/unit level. As noted in the analysis and recommendations sections, the complexity of the reimbursement process was a recurring theme throughout discussions with process participants. DDASS data, when MAs are closed out, can be used to calculate the noted delta. However, the database does not provide enough data to identify if units are using their DoD appropriations and failing to request reimbursement, in part or full.

2. Question 2

If there are instances where DoD has requested more than authorized, what are the factors that create such a situation?

This study did not uncover any instances where the DoD requested more than what was authorized; instead, it appears that the mechanisms to request additional RBA from FEMA function properly as many MAs showed amendments increasing the authorization after initial issuance. Because of the flow of cost estimation (ROM first, then detailed), it is more likely for a unit to have excess authority from FEMA rather than too little.

3. Question 3

What does the difference between the FEMA authorized reimbursement amount and the amount actually claimed represent?

As noted in the analysis and recommendations sections regarding metrics, the large difference between the FEMA authorized amount and the reimbursement claimed is

essentially a meaningless figure. To better understand the limitations of DoD cost estimating, it would instead be necessary to examine differences between issued DRADs and reimbursements. This would provide insight into the accuracy of the unit-level cost estimation done in support of DSCA work.

4. Question 4

If the amount requested is less than what should be reimbursed, can the shortfall be calculated during one specific hurricane event?

This study was not sufficient in scope to quantify the shortfall (if any) between reimbursement and actual costs incurred. To determine this figure would require examination of unit-level execution records alongside FEMA reimbursement requests - information that is not easily obtainable. For future studies, a limited-scope effort focusing on a sample of units for a particular incident could be performed.

5. Question 5

If the amount requested is less than what is should be claimed, how might the process be improved?

As previously discussed, the results of this research has not been able to determine a dollar value delta between what is and what should be claimed. Based upon feedback during our interviews, there is reason to believe that not all expenditures are being reimbursed. As previously stated, we believe the greatest current weakness to be present in level of knowledge at the unit/FEU echelon. This process could be greatly improved if all policy and process guidance was consolidated in one service specific desk manual for the intended audience at the unit/FEU level. This would provide a training template and would establish communication expectations for the unit/FEUs in their coordination with the SCCs.

Limitations: This recommended solution does not put in place any training requirements within the services and it does not provide any improvement to the issues created by the numerous manual entries throughout the process.

6. Question 6

Do the unit level financial managers understand the reimbursement process and their role within the process?

Although the research team was not able to contact all potential unit level participants, we are able to conclude through our interviews that the level of knowledge presumably varies across the unit FM personnel. In one case we conducted an interview with a unit financial manager with a high level of knowledge regarding the required documentation and communication with their respective SCC. This POC was provided by the SCC as an example of an exceptional professional who was familiar with the process. Yet, the SCC also established that this was an exception to the norm alluding to the belief that many of the unit financial managers do not possess this high level of familiarization.

Limitations: Our results are based off of our qualitative analysis through interviews with stakeholders. We were not able to interview all personnel involved with the process so our results are based on a sampling. Sampling will always yield the possibility of error, but for the sake of this study, we take the sample analysis to reflect insight into the entire stakeholder population.

7. Question 7

How does the non-routine nature of the DSCA funding and reimbursement process contribute to issues with reimbursement rates and timelines?

The non-routine nature of the DSCA processes are believed to primarily impact the level of knowledge at the unit financial management levels. Since NORTHCOM and the SCCs often work in DSCA environments, the stakeholders we interviewed at this level were very familiar with the correct process. In the cases of more centralized FM structures such as the Navy, many FEUs are familiar with this process because they fund more than just one command and therefore this process is more routine since there is a greater chance of involvement. In the case of the decentralized services, the non-routine nature of these events lends greatly to their lack of knowledge regarding the proper process. When these non-routine events do occur, it only reinforces the finding that there is no one stop reference that provides guidance for their financial actions. Service specific desk manuals would

remove the requirement for experience based knowledge while centralizing the information necessary for unit financial managers to do their jobs despite the events being non-routine.

Limitations: This question was deduced from the broad understanding gained by the research team thus far and does not rely on direct comment from any of the interviewees.

C. FUTURE RESEARCH RECOMMENDATIONS

The following recommendations for future research are intended to advance this study to a point where improvement can be implemented within the DSCA reimbursement process.

1. Expanded Service Specific Analysis

Future research specifically mapping the process within the SCCs with greater detail would assist the services in detailing the process on paper, a necessary step in the implementation of service specific desk guides. A project could be conducted for each service producing a near complete reference for a unit/FEU during future DSCA events.

2. USINDOPACOM

As this study focused on USNORTHCOM, a separate study could focus on USINDOPACOM to better understand where areas of improvement exist and what similar challenges are faced among the combatant commanders.

3. Reimbursement Gap

Future studies only focusing on the reimbursement gap could help better quantify improvement over time. Such research requires extensive unit and FEMA reimbursement data.

4. Disaster Relief Funding Reform

As the current process relies solely on the processing of reimbursable claims, the frequency of DoD involvement in DSCA events begs the question as to whether or not the reimbursement process is the best method. A 2001 study titled “A Framework for

Analyzing Emergency Management with an Application to Federal Budgeting” pointed out that many states have “rainy day” funds for disaster relief. The paper presents the option that one solution to disaster funding could be a reserve fund that has a ceiling which is filled through congressional appropriations until that ceiling is reached. The reserve could be drawn upon during each disaster event, only to be filled again during the next congressional appropriation (Donahue & Joyce, 2001). Perhaps this option could be applied to the DoD—FEMA relationship.

Future research efforts could focus on the concept of a reserve fund that could be created within DoD to provide immediate funding to DoD units when assigned to DSCA missions. This reserve fund could have a maximum ceiling to be replenished by FEMA when drawn upon. Direct cite expenditures referencing the reserve fund could be instructed in SCC specific guidance. The study could seek to answer the following questions:

- Who would be the most appropriate agent of the fund?
- How would the approval process have to be modified to authorize expenditures via direct cite during DSCA events?
- What would be the duration of the funds if these funds would have to last longer than DoD appropriations if left unused?
- Is it lawful for a fund with an indefinite duration to exist within the control of DoD comptrollers?
- What would be the recommended reserve fund ceiling?
- At what frequency would FEMA replenish the DoD fund.
- How would the audit requirements change?

If feasible, such reform could provide a higher degree of accounting accuracy for DSCA expenditures while successfully funding leaning forward costs incurred by the DoD before a disaster declaration.

5. Principal Agent Theory Applied Financial Management in Disaster Relief.

Further study into the affect the principal agent theory may have on the financial management of disaster relief efforts at the federal level is required. The fundamental premise of principal agent theory is that an actor (principal) calls upon another entity (agent) to complete some action on behalf of the principal. Generally, there are incentives for the agent to complete the action as desired by the principal, and at times the agent may be difficult to control or work as the principal desires. This theory applied to the public realm of government makes it only that much more intricate. With each layer of bureaucracy further iterations of this theory are born culminating in a multi layered, complex fabric affecting the DSCA reimbursement process.

Further study into principal agent theory and DSCA reimbursement may attempt to answer the following questions:

- Does FEMA act as principal since it grants the reimbursable authority?
- Is USNORTHCOM the only agent in the process?
- Do the units of action act as agents of their own service or USNORTHCOM/FEMA?
- Does the fact that FEMA's funds have no expiration date contribute to the poor rate of claims against this reimbursable authority?

Answering these questions may provide further insight into the difficulty of the financial management of DSCA events and the necessity for a clearly defined homogenous reimbursement process.

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LIST OF REFERENCES

- 7th U.S. Congress. (1803). *An act for the relief of the sufferers by fire, in the Town of Portsmouth, Statue II 7th Congress Chapter VI §*. Retrieved from <https://www.loc.gov/law/help/statutes-at-large/7th-congress/c7.pdf>
- 9th U.S. Congress. (1807). *Insurrection Act* (10 U.S.C. §§ 331–335 §).
- 98th U.S. Congress (1984) *The Economy Act*, 32 U.S.C. 17.502 § (1998). Retrieved from <https://www.law.cornell.edu/uscode/text/31/1535>
- 100th U.S. Congress (1998) *Robert T. Stafford disaster relief and emergency assistance act*, 42 U.S.C. 5121–5207 § (1998). Retrieved from <https://www.fema.gov/media-library-data/1519395888776-af5f95a1a9237302af7e3fd5b0d07d71/StaffordAct.pdf>
- 115th U.S. Congress. (2107) *Secretary of defense 10 U.S.C. 113 §*. Retrieved from <https://www.law.cornell.edu/uscode/text/10/113>
- Chief of Naval Operations. (2012). *Navy—OPNAV Instruction 5440.77B (DNS-33/USFF) Missions, functions, and tasks of United States Fleet Forces Command*. Retrieved from <https://standards.globalspec.com/std/1667159/OPNAV%205440.77B>
- Chief of Naval Operations. (2016). *Navy—OPNAV Instruction 3440.16E (N31) Navy defense support of civil authorities program*. Retrieved from https://fas.org/irp/DoDdir/navy/opnavinst/3440_16e.pdf
- Commandant of the Marine Corps. (2015). *Marine Corps Order 7300.21B (RFA) Marine Corps financial management standard operating procedures manual*. Retrieved from https://www.marines.mil/Portals/59/MCO_7300.21B_Final_Signed.pdf
- Davidson, J. (2017, August 29). Perspective | Federal agencies, employees surge to Harvey’s devastation. Retrieved from https://www.washingtonpost.com/news/powerpost/wp/2017/08/29/federal-agencies-employees-surge-to-harveys-devastation/?noredirect=on&utm_term=.812e42269bb4
- Defense Support of Civil Authorities, 32 CFR 185 Defense Support of Civil Authorities § (2011). Retrieved from <https://www.law.cornell.edu/cfr/text/32/part-185>
- Department of the Army. (2012). *Army Doctrine Publication 3–28 defense support of civil authorities*. Retrieved from https://fas.org/irp/DoDdir/army/adp3_28.pdf

- Department of Defense Inspector General. (2008.) *Approval process, tracking, and financial management of DoD disaster relief efforts*. (Report No. D-2008-130) Retrieved from <https://www.DoDig.mil/Reports/Compendium-of-Open-Recommendations/Article/1117251/approval-process-tracking-and-financial-management-of-DoD-disaster-relief-effor/>
- Department of Defense Inspector General. (2006). *Financial management of Hurricane Katrina relief efforts at selected DoD components*. Retrieved from <https://www.DoDig.mil/reports.html/Article/1117032/financial-management-of-hurricane-katrina-relief-efforts-at-selected-DoD-compon/>
- Department of Homeland Security. (2016a). *National Response Framework*. Retrieved from https://www.fema.gov/media-library-data/20130726-1914-25045-8516/final_national_response_framework_20130501.pdf
- Department of Homeland Security. (2016b). *Financial management support annex national response plan*. Retrieved from https://www.fema.gov/media-library-data/1467985634952-4a68b07bec36982be82ead6bae2f1c3f/Draft_NRF_Support_Annex_Financial_20160705_508.pdf
- Diamond, J., & Tatum, S. (2017, August 26) *Trump makes disaster declaration for Hurricane Harvey*. Retrieved from <https://www.cnn.com/2017/08/25/politics/trump-harvey-declaration/index.html>
- Donahue, A., & Joyce, P. (2001) *A framework for analyzing emergency management with an application to federal budgeting*. Retrieved from https://www.jstor.org/stable/3110007?seq=1#page_scan_tab_contents
- Federal Emergency Management Agency. (2005, August 29). President declares major disaster for Louisiana. Retrieved from <https://www.fema.gov/news-release/2005/08/29/president-declares-major-disaster-louisiana>
- Federal Emergency Management Agency. (2015, November 6). *Mission assignment policy*. Retrieved from <https://www.fema.gov/media-library/assets/documents/112564>
- Federal Emergency Management Agency. (2017, September 3). *Hurricane Harvey snapshot*. Retrieved from <https://www.fema.gov/news-release/2017/09/03/hurricane-harvey-snapshot>
- Haddow, G., Bullock, J., & Coppola, D. (2017). *Introduction to emergency management*, Burlington, MA: Elsevier Inc.
- Jonas, T. W. (June 1, 2006). *Financial management preparation for the 2006 hurricane season*. [Memorandum] Washington, DC: Under Secretary of Defense

- Joint Staff. (2013). *Joint Publication 3–28 Defense support of civil authorities*. Retrieved from https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_28.pdf
- Joint Staff. (2016). *Joint Publication 1–06 Financial management support to joint operations*. Retrieved from https://fas.org/irp/DoDdir/DoD/jp1_06.pdf
- Joint Staff J3. (2018). *Combined Joint Chiefs of Staff defense support of civil authorities execute order*.
- Kotowski, P. (n.d.). *Whiskey rebellion*. [Washington Library]. Retrieved from <https://www.mountvernon.org/library/digitalhistory/digital-encyclopedia/article/whiskey-rebellion/>
- Larson, E., & Peters, J. (2001). *Preparing the U.S. Army for homeland security* Monograph Reports No. MR 1251, Appendix D. Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1251/MR1251.AppD.pdf
- Maucione, S. (2017, August 29) *Military response to Hurricane Harvey could reach Katrina proportions*. Retrieved from <https://federalnewsnetwork.com/defense/2017/08/military-response-to-hurricane-harvey-could-reach-katrina-proportions/>
- National Weather Service. (November 2016). *Hurricane Katrina—August 2005*. Retrieved from <https://www.weather.gov/mob/katrina>
- Office of the Under Secretary of Defense for Policy. (2016a). *DoD Instruction 3025.23 Domestic defense liaison with civil authorities*. Retrieved from <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/DoDi/302523p.pdf>
- Office of the Under Secretary of Defense for Policy. (2016b). *DoD Manual 3025.01, Volume 2 Defense support of civil authorities*. Retrieved from https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/DoDm/302501_vol02.pdf
- Office of the Under Secretary of Defense for Policy. (2018). *DoD Directive 3025.18 Defense support of civil authorities*. Retrieved from <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/DoDd/302518p.pdf?ver=2018-03-19-093120-683>
- Secretary of the Air Force. (2018). *Air Force Instruction 65–601, Volume 1 Budget Guidance and Procedures*. Retrieved from https://static.e-publishing.af.mil/production/1/saf_fm/publication/afi65-601v1/afi65-601v1.pdf
- Secretary of the Air Force. (2012). *Air Force Policy Directive 10–8: Defense support of civil authorities*. Retrieved from <https://fas.org/irp/DoDdir/usaf/afpd10-8.pdf>

- Secretary of the Air Force. (2015a). *Air Force Instruction 10–801 Defense support of civil authorities*. Retrieved from <https://fas.org/irp/DoDdir/usaf/afi10-801.pdf>
- Secretary of the Air Force. (2015b). *Air Force Manual 65–605, Volume 1 Budget, policy and technical procedures*. Retrieved from https://static.e-publishing.af.mil/production/1/saf_fm/publication/afman65-605v1_afgm2018-01/afman65-605v1_afgm2018-01.pdf
- Under Secretary of Defense (Comptroller). (2015). *DoD 7000.14-R Financial management regulations*. Retrieved from https://comptroller.defense.gov/Portals/45/documents/fmr/Combined_Volume1-16.pdf
- U.S. Department of Commerce (2018). *Major Hurricane Harvey - August 25–29, 2017*. Retrieved from https://www.weather.gov/crp/hurricane_harvey
- U.S. Northern Command (2005, September 12). U.S. Northern Command support to Hurricane Katrina disaster relief. Retrieved from <http://www.northcom.mil/Newsroom/Article/563197/us-northern-command-support-to-hurricane-katrina-disaster-relief/>
- U.S. Northern Command J3. (2017). *United States Northern Command defense of civil authorities operations order*.
- U.S. Northern Command J7. (2018). *Vista Capital Table Top Exercise*. Conference, Colorado Springs.
- U.S. Northern Command J83. (2018). *United States Northern Command (USNORTHCOM) Financial Management Augmentation Team (FMAT) operations in Defense Support of Civil Authorities (DSCA) handbook*.
- World Vision. (2018, September 7). 2017 Hurricane Harvey: facts, FAQs, and how to help Retrieved from <https://www.worldvision.org/disaster-relief-news-stories/hurricane-harvey-facts>

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